

CITY OF LEEDS



REPORT

ON THE

HEALTH

OF THE CITY

FOR THE YEAR 1959

BY

Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.

Medical Officer of Health and Principal School Medical Officer.

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HEALTH COMMITTEE

LORD MAYOR (Alderman Gertrude Annie Stevenson, J.P.)

Chairman : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor W. M. JONES (Deputy Chairman)
„ Z. P. FERNANDEZ, B.A., M.D., D.P.H.	„ F. STUBLEY (from May, 1959)
„ W. FOWLER (to Febru- ary, 1959)	„ G. I. ADDLESTONE
„ F. WALKER, O.B.E.	„ W. O. D. SMART, F.C.I.S. (to May, 1959)
„ J. HILEY, M.P. (from May, 1959)	„ MARION S. MUSTILL (to May, 1959)
„ F. NAYLOR	„ W. MERRITT, S.R.N., R.M.N.
Councillor A. R. BRETHERICK (to May, 1959)	„ G. MURRAY
„ VYVYAN M. CARDNO.	„ Mrs. LUCY LYONS (from May, 1959)
„ L. WALSH, M.B., Ch.B.	„ Miss ENID M. COWARD (from May, 1959)
„ T. W. KIRKBY (to May, 1959)	„ D. W. BRADLEY, LL.B., L.A.M.T.P.I.
„ H. DRAKE, L.D.S., R.C.S., Barrister-at- Law	„ ST. JOHN BINNS

EX-OFFICIO MEMBERS :—

Representatives of Leeds Medical Committee (National Health Service)
invited to attend in an advisory capacity :—

Dr. J. H. E. MOORE, Dr. W. ADAMS (or a deputy in each case)

SUB-COMMITTEES

SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE.

Chairman : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor MARION S. MUSTILL (to May, 1959)
„ Z. P. FERNANDEZ, B.A., M.D., D.P.H.	„ T. W. KIRKBY (to May, 1959)
„ W. FOWLER (to Febru- ary, 1959)	„ W. MERRITT, S.R.N., R.M.N.
„ F. NAYLOR (to May, 1959)	„ W. M. JONES (from May, 1959)
Councillor Mrs. LUCY LYONS (from May, 1959)	„ ST. JOHN BINNS (to May, 1959)
„ VYVYAN M. CARDNO	„ H. DRAKE, L.D.S., R.C.S., Barrister-at- Law.
„ A. R. BRETHERICK (to May, 1959)	„ Miss ENID M. COWARD (from May, 1959)
„ L. WALSH, M.B., Ch.B.	„ F. STUBLEY (from May to June, 1959)
„ D. W. BRADLEY, LL.B., L.A.M.T.P.I. (from June, 1959)	

CO-OPTED MEMBERS :—

Mrs. H. BEEVERS Mrs. E. E. BIBBY

SUB-HEALTH (MENTAL HEALTH SERVICES) COMMITTEE.

Chairman : Alderman Z. P. FERNANDEZ, B.A., M.D., D.P.H.

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor H. DRAKE, L.D.S., R.C.S., Barrister-at-Law
„ WINIFRED SHUTT	„ W. M. JONES (to May, 1959)
„ W. FOWLER (to February, 1959)	„ MARION S. MUSTILL (to May, 1959)
„ F. WALKER, O.B.E.	„ F. STUBLEY (from June, 1959)
„ J. HILEY, M.P. (from May to June, 1959)	„ ST. JOHN BINNS (from May to October, 1959)
„ F. NAYLOR	„ W. MERRITT, S.R.N., R.M.N.
Councillor A. R. BREATHERICK (to May, 1959)	„ T. W. KIRKBY (to May, 1959)
„ L. WALSH, M.B., Ch.B.	„ Mrs. LUCY LYONS (from June, 1959)
„ D. W. BRADLEY, LL.B., L.A.M.T.P.I. (to June, 1959)	„ ENID M. COWARD (from October, 1959)

CO-OPTED MEMBERS :—

Mrs. A. R. INCE, M.B.E.	Mrs. N. BILLINGTON (from July, 1959)
Mrs. S. MURRAY	
Mrs. J. SLATER (to July, 1959)	

SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE

Chairman : Councillor W. M. JONES

Alderman WINIFRED SHUTT	Councillor G. I. ADDLESTONE
„ W. FOWLER (to February, 1959)	„ W. O. D. SMART, F.C.I.S. (to May, 1959)
„ J. HILEY, M.P. (from May, 1959)	„ MARION S. MUSTILL (to May, 1959)
„ F. NAYLOR (from May, 1959)	„ W. MERRITT, S.R.N., R.M.N.
Councillor VYVYAN M. CARDNO	„ D. W. BRADLEY, LL.B., L.A.M.T.P.I.
„ H. DRAKE, L.D.S., R.C.S., Barrister-at-Law	„ G. MURRAY
„ T. W. KIRKBY (to May, 1959)	„ F. STUBLEY (from May, 1959)
	„ ST. JOHN BINNS (from May, 1959)

PUBLIC HEALTH STAFF

Medical Officer of Health and Principal School Medical Officer	Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	G. E. WELCH, M.B., B.S., D.P.H.

Medical Staff and Nursing Staff

Chief Assistant School Medical Officer	J. G. JAMIESON, M.A., B.M., B.Ch., D.C.H.
Medical Officer for Mental Health Services	J. M. McALPIN, M.B., Ch.B.
Assistant Medical Officer of Health in charge of Immunisation	A. SHAW, M.B., B.S.
Honorary Assistant Medical Officer of Health (by arrangement with the University of Leeds)	C. W. DIXON, M.D., D.P.H., D.L.O., D.C.H., Reader in Epidemiology, University of Leeds (to 31.3.59) A. N. MACPHAIL, M.C., M.D., Ch.B., D.P.H., Lecturer in Public Health, University of Leeds (from 1.9.59)
Assistant Medical Officer of Health for Maternity and Child Welfare	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S. ISOBEL B. ALEXANDER, M.B., Ch.B. EUGENIE C. ILLINGWORTH, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P. JESSIE I. ROSIE, M.B., Ch.B., D.P.H. MARGARET C. PULLAN, M.B., Ch.B. BARBARA M. BROOKE, M.B., Ch.B. FRANCES E. SMITH, M.B., Ch.B., D.P.H. JAMESINA FELGATE, M.B., Ch.B. ETHEL MAY WRIGHT, M.B., Ch.B., D.C.H.
Superintendent Health Visitor and School Nurse	JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)
Health Visitor Tutor in Sole Charge	FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A.
Supervisor of Midwives	DOROTHY HUMPHREYS, S.R.N., S.C.M.

Superintendent, Part II Midwifery Training School	VERA E. LANGRIDGE, S.R.N., S.C.M., M.T.D. (to 22.11.59) PAMELA BIRD, S.R.N., S.C.M., M.T.D. (Appointed 30.10.59 to commence duties 1.1.60)
Superintendent Nurse, Home Nursing Service	EDITH G. MEADOWS, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service	ELSIE BOULTON, S.R.N., S.C.M., Q.N.

Chief Public Health Inspector and Deputy

Chief Public Health Inspector	.. J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Deputy Chief Public Health Inspector	J. H. WYATT, M.A.P.H.I.

City Analyst and Deputy

City Analyst R. A. DALLEY, F.R.I.C.
Deputy City Analyst	.. .. L. A. PERKIN, B.Sc., F.R.I.C.

Administrative Staff

Chief Administrative Assistant	.. A. BATLEY
Executive Officer, Mental Health Services	J. SQUIRE HOYLE, M.B.E.
Accountant	.. .. H. A. CORLETT, F.C.A.
Assistant Administrative Officer	.. W. WILSON, A.C.I.S.
Principal Clerks :—	
Statistics	.. .. E. RENSHAW
General Sanitation	.. .. J. R. MOIR
Infectious Diseases	.. .. J. K. BEEVERS
Food and Drugs	.. .. S. TITTERINGTON
Finance	.. .. J. PEACOCK
Disinfestation Officer	.. .. C. W. LAMB, M.R.S.H., F.R.E.S.
Ambulance Officer	.. .. J. H. DAYKIN (from 2.2.59)
Home Help Organiser	.. .. Mrs. DOROTHY W. ALFORD

Consultants to the Health Committee

Consultant Adviser in Tuberculosis	.. G. F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P., M.R.C.S.
Consultant Adviser, Infectious Diseases	E. C. BENN, M.B., Ch.B., D.P.H.
Consultant in Child Health	.. .. Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Psychiatrists	.. .. Professor G. R. HARGREAVES, O.B.E., M.R.C.S., L.R.C.P.
	A. H. WILSON, M.B., Ch.B., D.P.M.
Consultant Adviser in Venereal Diseases	J. B. BITTNER, M.B., Ch.B. (to February, 1960) R. D. CATTERALL, M.R.C.P. (from February, 1960)

PUBLIC HEALTH DEPARTMENT

STAFF

<i>Class of Employees</i>	<i>No. employed at 31/12/59</i>
Public Health Inspectors	47
Female Public Health Inspector	1
Student Probationer Public Health Inspectors	17
Condemned Meat Room Attendant	1
Assistant Analysts	3
Health Visitors	58
Student Health Visitors (including part-time)	10
Midwives (including part-time)	49
Dispensers (including part-time)	16
Physiotherapists (including part-time)	4
Immunisation Nurses (including part-time)	3
Social Workers	4
Day Nurseries	131
District Nurses (including part-time)	71
B.C.G. Nurse	1
Infectious Diseases Visitors	2
Clerical Staff	94
Welfare Foods	6
The Hollies Preventorium	15
Red Court Hostel (Midwifery Training)	26
Nurses' Home	1
Convalescent Home, Southport	3
Mental Health Services	101
Central Ambulance Station Staff	126
General Disinfection and Disinfestation	25
Personal Disinfection and Disinfestation.. .. .	6
Flushing Staff	11
Public Convenience Lighting	1
Mortuary Service	6
Rodent Operatives	6
Lavatory Attendants	26
Lavatory Cleaners	1
Caretakers and Cleaners	36
Home Helps (including part-time)	271

City of Leeds

PUBLIC HEALTH DEPARTMENT,
25, EAST PARADE,
LEEDS, 1.

Tel. No. Leeds 3-0661

July, 1960

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I present herewith the Annual Report of the Medical Officer of Health of the City of Leeds for the year 1959.

The population of the city showed its customary increase and was estimated by the Registrar General to be 513,300 at mid-year as compared with his estimate of 511,600 at mid-1958.

**Vital
Statistics**

The number of births registered during the year was 8,353 as compared with 8,379 in 1958, giving birth-rates of 16.3 and 16.4 respectively. The five-year average (1954-1958) was 15.7.

Deaths of infants under one year of age numbered 213 giving an infant mortality rate of 25. The corresponding figures for 1958 were 218 and 26 respectively. The average infant mortality rate for the years 1954-1958 was 26. Deaths of infants aged under one month totalled 149 as compared with 152 in the previous year and a five-year average of 145; the neo-natal mortality rate was 17.8 as against 18.1 in 1958. Peri-natal deaths were 300, a reduction of 32 as compared with the previous year and the peri-natal mortality rates were 35 and 39 respectively. The number of stillbirths registered fell to 170 as against 202 in 1958; the stillbirth rate was 19.9 per thousand total births as against 23.5 in 1958.

There were 4 maternal deaths giving a maternal mortality rate of 0.47 per thousand total births.

The general death-rate for the city was 11.9 as against 11.6 in 1958. The death-rates for the principal causes of death were as follows, the figures in brackets being the rates for 1958:—

Cancer (all sites)	2.05	(2.08)
Cancer (lung and bronchus)	0.56	(0.53)
Coronary disease	2.25	(2.11)
Other forms of heart disease	1.34	(1.62)
Vascular diseases of the central nervous system	1.56	(1.49)
Bronchitis	0.97	(0.84)
Pneumonia	0.90	(0.75)

Infectious Disease

There was one case of diphtheria, bacteriologically confirmed, during the year. This is the second successive year in which a case of diphtheria has been recorded. These instances serve as a reminder of the need to continue our diphtheria immunisation campaign.

There was a substantial decrease in the number of cases of poliomyelitis notified—11 as against 95 in 1958. It is tempting to attribute this decrease to the large programme of polio vaccination. We must remember, however, that the number of cases of poliomyelitis varies irregularly from year to year and it will be several years before the results of the polio vaccination programme can be evaluated.

Dysentery was troublesome during the year and 1,726 cases were notified. The cases were mostly of the mild *Sonne* type and there was only one death.

Venereal Diseases

There was a small decrease in both male and female cases of syphilis. There was an increase, though not as large as in the previous year, in gonorrhœa in both males and females. Further information is to be found in Dr. Catterall's section of the Report.

Vaccination and Immunisation

Poliomyelitis vaccination continued on the "grand scale" during the year and both clinic doctors and family doctors vaccinated large numbers. The children of school age are now a well-protected group but much remains to be done among the younger children and the expectant mothers. I am glad to record that many more expectant mothers are accepting the vaccine; protection is specially necessary for them since poliomyelitis tends to take a severe form when it occurs in pregnancy. The 15-26 age group at first took little interest in polio vaccination but the death from poliomyelitis

of a professional footballer in April led to a sudden demand. Two evening "open sessions" were held at the Central Clinic and at these about 5,000 young people were vaccinated. The staff of the Central Clinic are to be congratulated on the efficiency with which they coped with the volume of work involved.

In October the hospital authorities introduced new arrangements for the admission of acute medical and acute surgical cases. Under these arrangements beds were allocated for Leeds patients in hospitals outside the city boundary. During the winter months the number of patients requiring removal to hospital commonly rises steeply and it was feared that the increased mileage involved in admitting to hospitals outside the city might prove beyond the capacity of the Ambulance Service. It so happened that the numbers of acute patients requiring admission during the winter were much fewer than in an average winter. The Ambulance Service was not strained beyond capacity. The problem is not yet satisfactorily solved.

**Ambulance
Service**

There was a substantial increase in the number of sitting cases carried; this is due to the development and expansion of out-patient services especially for the aged and psychiatric patients. This trend is likely to continue.

The highlight of the year was the Mental Health Act which received the Royal Assent in July. None of its main provisions had, however, come into effect by the end of the year. In May the Minister of Health issued an important Circular in which he reminded local authorities that the Government had announced its acceptance of the main provisions in the Royal Commission's Report. He pointed out that although full implementation of the Report would have to await the passing of the Act, the main recommendations affecting local authority services could be adopted under existing powers and need not therefore await the passing of the Mental Health Act. The Leeds Mental Health Services are well developed and the Authority was already utilising fully its powers under Section 28 of the National Health Service Act. By the end of the year preparatory work for three hostels was already well under way.

**Mental
Health**

In the Circular which I referred to above, the Minister of Health stressed that the principles of the new legislation were "that there should be a reorientation of the Mental Health Services away from

institutional care when the special services of the hospital services are not needed and towards care in the community." Very much depends upon the attitude of the community itself to the mentally disordered and much education of the public opinion will be necessary. To remove mental patients from some place called "Hospital" to some other place called "Hostel" will in itself achieve very little. We must encourage the community to look upon those living in a hostel as part of the community. Our Mental Health Hostels must be a "half way house" to ease the passage from hospital back into full community life. No doubt not all patients will be able to make the full transition but those who must remain permanently in hostel must nonetheless be encouraged to take as full a part as they can in the life of the city.

Staff

I regret to record the death in December of Mrs. A. M. Taylor, an outstanding personality in the mental health field. Mrs. Taylor had, for many years, been Superintendent of the East Leeds Occupation Centre. She was a qualified teacher and dedicated to the work of training the mentally handicapped. Her death is a great loss to our Mental Health Service.

Acknowledgements

Once again it is a pleasure to offer thanks to the officers of the many Departments of the Corporation with whom the Health Department works in close accord. I cannot name all but would like to mention particularly the Town Clerk, the City Treasurer, the Chief Education Officer, the City Architect, the City Engineer, the Director of Housing, the Director of Works, the Welfare Services Officer and the Children's Officer.

My staff and I wish to offer our sincere thanks to the Chairman, Deputy Chairman and Members of the Health Committee for their unfailing courtesy and understanding during the year.

I am,

Ladies and Gentlemen,

Your obedient servant,

D. B. BRADSHAW.

SUMMARY OF VITAL STATISTICS

1959

LATITUDE 53° 48' North.	LONGITUDE 1° 32' West.
AVERAGE HEIGHT ABOVE SEA LEVEL	250 feet.
AREA OF CITY	40,613.5 Acres
HOME POPULATION (Registrar General's Estimate) ..	513,300
ESTIMATED NUMBER OF HOUSES	170,979
RATEABLE VALUE	£7,122,091
SUM REPRESENTED BY A PENNY RATE	£28,530

	Average	
	1959.	1949-58
BIRTH RATE (births per 1,000 living)	16.3	15.8
DEATH RATE (deaths per 1,000 living)	11.9	12.0
NATURAL INCREASE OF POPULATION	2,233	1,955
(Excess of births over deaths in the year)		
INFANT MORTALITY RATE	25	28
(Deaths under 1 year per 1,000 births)		
DEATH RATE from Pneumonia and Bronchitis	1.88	1.21
" " Cancer	2.29	2.05
" " Diarrhoea and Enteritis (under 2 years)		
per 1,000 births	0.48	1.06

	Cases	Case- rate	Deaths	Death rate
SCARLET FEVER	620	1.21	..	..
DIPHTHERIA	1	0.00	..	..
TYPHOID FEVER .. .. .	..	..	..	..
MEASLES	8,693	16.94	1	0.00
WHOOPING COUGH	642	1.25	1	0.00
RESPIRATORY TUBERCULOSIS.. .. .	380	0.74	45	0.09
OTHER FORMS OF TUBERCULOSIS	39	0.08	5	0.01

VITAL STATISTICS

RELATING TO MOTHERS AND INFANTS

(in accordance with Ministry of Health Circular 1/60)

	1959	1958	Average 1954-58
LIVE BIRTHS—			
Number	8,353	8,379	8,011
Rate per 1,000 population	16.3	16.4	15.7
ILLEGITIMATE LIVE BIRTHS PER CENT. OF TOTAL LIVE BIRTHS ..	6.5	6.2	6.3
STILL BIRTHS—			
Number	170	202	184
Rate per 1,000 total births (live and still) ..	19.9	23.5	22.5
TOTAL BIRTHS (live and still)	8,523	8,581	8,195
INFANT MORTALITY—			
Number of deaths under 1 year of age ..	213	218	207
Infant mortality rate per 1,000 live births	25.4	26.0	25.8
Legitimate infant mortality rate	24.8	25.4	25.1
Illegitimate „ „ „	35.0	34.8	35.6
NEO-NATAL MORTALITY RATE			
(First four weeks) per 1,000 live births	17.8	18.1	18.1
EARLY NEO-NATAL MORTALITY RATE (Deaths under 1 week per 1,000 live births)	15.6	15.5	15.6
PERI-NATAL MORTALITY RATE (Stillbirths and deaths under 1 week com- bined per 1,000 <u>total</u> births)	35.2	38.7	37.8
MATERNAL MORTALITY—			
Number of maternal deaths (including abortion)	4	*7	5
Maternal mortality rate per 1,000 <u>total</u> births	0.47	0.82	0.59

* Includes 2 non-residents, not transferable.

Natural and Social Conditions
Vital Statistics

NATURAL AND SOCIAL CONDITIONS

Area.—The area of the city is 40,613·5 acres.

Population.—The Registrar General's estimate of the home population of the city at mid-1959 was 513,300.

Dwelling-houses.—The total number of dwelling-houses in the city at December, 1959, was 170,979.

Rateable Value.—The rateable value of the city at 1st April, 1960, was £7,122,091 and the estimated sum represented by a penny rate was £28,530. The corresponding figures at 1st April, 1959, were £6,953,988 and £27,775.

Principal Industries.—Engineering, wholesale clothing, woollen and worsted manufacture, and printing continue to be the city's principal industries. Approximate numbers of persons employed in these industries are as follows:—engineering (including metal manufacture, vehicle manufacture, metal goods and precision instruments) 50,000, wholesale clothing 43,000, woollen and worsted manufacture 13,000 and printing 10,000. Approximately 37,000 persons are employed in distributive trades. These figures are not strictly related to the population of the city as, of course, they include persons not resident in the city.

The average level of unemployment during the year was 1·4 per cent.

Meteorology.—The number of hours of bright sunshine recorded during the year was 1,407·28. The sunniest month was June with a daily average of 7·03 hours and the month with the least sunshine was December with a daily average of 0·48 hours. The sunniest day of the year was July 15th with 14·00 hours and the daily average for the whole year was 3·86 hours.

The total rainfall for the year was 21.12 inches. The month with the least rain was February with a total of 0.07 inches ; the month with the most rain was December with 4.33 inches. Taking the four quarters of the year, the rainfall in the first quarter was 3.27 inches ; in the second 5.31 ; in the third 3.55 and in the fourth 8.99 inches.

The month with the highest average temperature was August with 65.41°F and the lowest January with 35.77°F. The average temperature for the whole year was 52.28°F.

VITAL STATISTICS

BIRTHS

The births registered in the city during the year numbered 9,045, comprising 4,607 males and 4,438 females. Of these, 450 males and 447 females born to parents not residing in Leeds were transferred to the areas in which the home addresses were situated, whilst 104 males and 101 females, born outside the city to Leeds parents, were transferred in, making a nett total of 8,353 births, comprising 4,261 males and 4,092 females.

The birth-rate was 16.3 per thousand of the home population, as compared with 16.4 for the previous year and an average of 15.7 for the previous five years. The birth-rate for the city was lower than that for England and Wales which was provisionally 16.5 per thousand of the population.

The birth-rate as adjusted by the Area Comparability Factor (Births) is given in the table on page 5.

Excess of Births over Deaths.—The excess of births over deaths or the “ natural increase of population ” was 2,233 as compared with 2,447 for the previous year and an average of 1,955 for the previous ten years.

Illegitimate Births.—Of the 8,353 (nett) births registered, 542 or 6·5 per cent. were illegitimate as compared with 517 or 6·2 per cent for the previous year and an average of 506 or 6·3 per cent. for the previous five years.

Stillbirths.—The nett number of stillbirths registered during the year was 170, comprising 85 males and 85 females. The rate per thousand of the population was 0·33 as compared with 0·39 for the previous year. The provisional rate for England and Wales was 0·35. Expressed as a percentage of the total births, the rate was 2·0 as compared with 2·4 for the previous year. Of the 170 (nett) stillbirths registered, 16 or 9·4 per cent. were illegitimate. The ratio of registered 'still' to registered 'live' births was 1 to 49 as compared with 1 to 41 for the previous year.

DEATHS

The gross number of deaths registered in the city was 6,481, comprising 3,349 males and 3,132 females, giving a gross death-rate of 12·6 as compared with 12·5 for the previous year and an average of 12·4 for the previous five years. The inward transferable deaths numbered 426 (187 males and 239 females) and outward transferable deaths 787 (414 males and 373 females) which, after adjustment, leaves a nett total of 6,120 deaths debitable to the city, made up of 3,122 males and 2,998 females.

The corresponding death-rate was 11·9 as compared with 11·6 for the previous year and an average of 11·4 for the previous five years. The provisional death-rate for England and Wales was 11·6.

Area Comparability Factor.—The Registrar General supplies an Area Comparability Factor (A.C.F.) and this, when multiplied by the crude death-rate, gives an adjusted death-rate which is comparable with a similarly adjusted death-rate for any other area. An adjusted death-rate makes allowance for any difference in the population structure of the area, by sex and age, from that of England and Wales as a whole. An A.C.F. is also supplied for the adjustment of the crude birth-rate.

The A.C.F. (Deaths) for Leeds was 1·14 and this, when applied to the crude death-rate of 11·9 gave an adjusted death-rate of 13·6.

The following table gives the crude and adjusted rates of London Administrative County and the twelve principal cities of England and Wales.

	Population	Birth-rate		Death-rate		Death-rate from		Infant Mortality Rate
		Crude	Adjusted	Crude	Adjusted	Resp. Tub.	Other Tub.	
London Admin. County	3,204,000	17·3	15·6	11·9	11·7	0·10	0·01	22
Birmingham	1,091,500	17·7	16·8	11·6	13·3	0·09	0·01	25
Liverpool	757,500	20·6	19·2	11·3	13·8	0·14	0·00	27
Manchester	672,300	18·3	17·6	12·5	14·6	0·12	0·01	26
Leeds	513,300	16·3	16·0	11·9	13·6	0·09	0·01	25
Sheffield	499,400	15·4	15·6	11·7	12·9	0·13	0·01	17
Bristol	436,600	15·3	15·3	11·9	11·5	0·06	0·01	20
Nottingham	313,300	18·0	17·2	11·5	13·0	0·08	0·01	24
Hull	301,800	18·7	17·9	11·1	13·5	0·12	0·01	30
Bradford	289,100	17·6	17·6	14·4	14·1	0·08	0·00	30
Leicester	275,400	16·5	16·7	12·3	12·5	0·05	0·00	21
Newcastle-upon-Tyne	271,100	19·2	18·6	12·1	13·5	0·10	0·01	27
Stoke-on-Trent	270,800	15·6	14·6	11·0	13·2	0·17	0·02	21

Causes of Death.—The principal causes of death during 1959 are given below (International List numbers in brackets).

Malignant and lymphatic neoplasms (140-205) ..	1,173
Coronary disease (420)	1,156
Vascular lesions of central nervous system (330-334)	802
Heart disease (410-416, 421-443)	690
Bronchitis (500-502)	500
Pneumonia (490-493, 763)	463
Other circulatory diseases (444-468)	235

The above group of diseases accounted for 5,019 or 82·0 per cent. of the total deaths as compared with 4,756 or 80·2 per cent. last year.

The table on page 9 sets out the causes of death in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death.

Deaths in Age Groups.—The table on page 13 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups -1, 1-2 and 2-5 was 250 or 4·1 per cent. of the total deaths, as compared with 245 or 4·1 per cent. in the previous

year and an average of 235 or 4·0 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 553 or 9·0 per cent. as compared with 558 or 9·4 per cent. in the previous year. In the remaining age groups over 45 years the deaths numbered 5,567 or 91·0 per cent. as compared with 5,374 or 90·6 per cent. in the previous year.

Cremations.—Out of a total of 6,120 Leeds deaths during the year, the number of bodies disposed of by cremation was 2,858 or 46·7 per cent. as compared with 2,733 or 46·1 per cent. in 1958. Of this number, 2,105 were cremated at Lawnswood and the remainder, 753, at Cottingley. The total number of cremations represents an increase of 125 on the figure for the previous year and an increase of 405 on the average number of cremations for the previous five years.

Public Mortuary.—The number of bodies received into the public mortuary during 1959 was 782. The number of autopsies performed was 633, the highest number on record. Arrangements were made by relatives or friends for the disposal of 722 bodies and by the Welfare Services Department for 53; other arrangements were made for two bodies and five were to be disposed of during 1960.

INFANT MORTALITY

The number of deaths of children under one year of age during 1959 was 213 (males 109, females 104) as compared with 218 (males 127, females 91) in 1958. The infant mortality rate was 25 as compared with 26 for the previous year and an average of 26 for the previous five years. The provisional infant mortality rate for England and Wales was 22.

Illegitimate Infant Mortality.—Of the 542 illegitimate births, 19 died before reaching the age of one year, which is equal to an infant mortality rate of 35 as compared with 35 last year.

Causes of Death.—The principal causes of death of infants under one year of age during the year, in order of numerical importance, were prematurity 59 (27·7 per cent.), congenital malformations 37 (17·4 per cent.), post-natal asphyxia and atelectasis 27 (12·7 per cent.) and pneumonia 21 (9·9 per cent.). Respiratory diseases were responsible for 25 or 11·7 per cent. of the total deaths under one year of age; in 1958 the number was 34 or 15·6 per cent. and the average for the previous five years was 32 or 15·5 per cent. For further details of causes of death of infants under one year of age, see the tables on pages 14 and 15.

Prematurity.—The number of deaths from prematurity was 59. The death-rate from prematurity per thousand live births was 7·1 as compared with 9·0 for the previous year and an average of 6·9 for the previous five years. There were 25 deaths assigned to various other diseases of early infancy in each of which prematurity was mentioned on the death certificate.

Deaths in Age Groups.—Of the total (213) infant deaths, 95 or 44·6 per cent. took place on the first day; 130 or 61·0 per cent. in the first week; 149 or 70·0 per cent. in the first month; 22 or 10·3 per cent. between one and three months; 24 or 11·3 per cent. between three and six months; 7 or 3·3 per cent. between six and nine months and 11 or 5·2 per cent. between nine and twelve months.

Neo-Natal Mortality.—The number of deaths occurring in the first month of life was 149 or three less than in the previous year, the corresponding neo-natal mortality rate being 17·8 as compared with 18·1 in 1958.

Of the total deaths under one year of age, 70·0 per cent. occurred in the first month and of deaths in the first month 64·8 per cent. occurred on the first day, 87·2 per cent. in the first week and 94·6 per cent. in the first two weeks.

Peri-Natal Mortality.—The term “peri-natal mortality” has been introduced to measure infant mortality due to causes operating before, during and immediately after birth and includes stillbirths and deaths of infants in the first week of life. The peri-natal mortality rate is calculated per thousand total births (live and still). The rate for 1959 was 35 as compared with 39 for the previous year and an average of 38 for the previous five years.

MATERNAL MORTALITY

The number of mothers who lost their lives in childbirth during the year was 4 as compared with 7 in the previous year. The corresponding maternal mortality rate per thousand live births was 0·48 as compared with 0·84 for the previous year and an average of 0·60 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 0·47 as compared with 0·82 for the previous year and an average of 0·59 for the previous five years. In connection with the previous year's figures, it should be pointed out that the seven deaths included two with home addresses in Scotland ; as no transfer arrangements can be made with areas outside England and Wales, the deaths were debited to Leeds.

The causes of death were as follows :—

- (1) Generalised peritonitis following septic abortion but with no evidence to show how caused.
- (2) 1a. Pulmonary embolus
b. Spontaneous abortion
2. Bronchopneumonia.
- (3) 1a. Bilateral pulmonary embolus
b. Left femoral thrombosis
2. Childbirth 6 weeks previously.
- (4) 1a. Acute right heart failure
b. Amniotic embolism
c. Pregnancy.

PRINCIPAL CAUSES OF DEATH

International List Nos.	Diseases	No. of deaths in 1959 (nett)	No. of deaths in 1958 (nett)	Death rate 1959
001-008	Tuberculosis, respiratory	45	54	0.09
010-019	Tuberculosis, other forms	5	2	0.01
020-029	Syphilitic disease	13	20	0.03
055	Diphtheria .. .. .	..	..	..
056	Whooping Cough	1	1	0.00
057	Meningococcal infections	1	2	0.00
080	Acute poliomyelitis .. .. .	..	3	..
085	Measles	1	..	0.00
Remainder of 001-138	Other infective and parasitic diseases	12	18	0.02
151	Malignant neoplasms: Stomach	179	165	0.35
162, 163	Lung, bronchus	290	270	0.56
170	Breast '	90	100	0.18
171-174	Uterus	52	37	0.10
Remainder of 140-203	Other malignant and lymphatic neoplasms	535	468	1.04
205	Leukaemia, aleukaemia	27	26	0.05
204	Diabetes	34	44	0.07
260	Vascular lesions of central nervous system ..	802	760	1.56
420	Coronary disease, angina	1,156	1,075	2.25
440-443	Hypertension with heart disease	108	140	0.21
Remainder of 410-443	Other heart disease	582	686	1.13
444-468	Other circulatory disease	235	216	0.46
480-483	Influenza	62	9	0.12
490-493 } 763 }	Pneumonia	463	383	0.90
500-502 } 470-476 }	Bronchitis	500	430	0.97
510-527 }	Other diseases of the respiratory system	43	45	0.08
540, 541 } 543, 571 }	Ulcer of stomach and duodenum	52	58	0.10
572, 764 }	Gastritis, enteritis and diarrhoea	19	20	0.04
590-594	Nephritis and nephrosis	33	42	0.06
610	Hyperplasia of prostate	22	17	0.04
640-689	Pregnancy, childbirth and abortion	4	7	0.01
750-759	Congenital malformations	58	56	0.11
Residual	Other defined and ill-defined diseases	481	550	0.94
E810-E835 } E800-E802 } E840-E962 }	Motor vehicle accidents	60	59	0.12
E963 } E970-E979 }	All other accidents	95	97	0.19
E964, E965 } E980-E999 }	Suicide	55	70	0.11
	Homicide and operations of war	5	2	0.01
	Totals	6,120	5,932	11.9

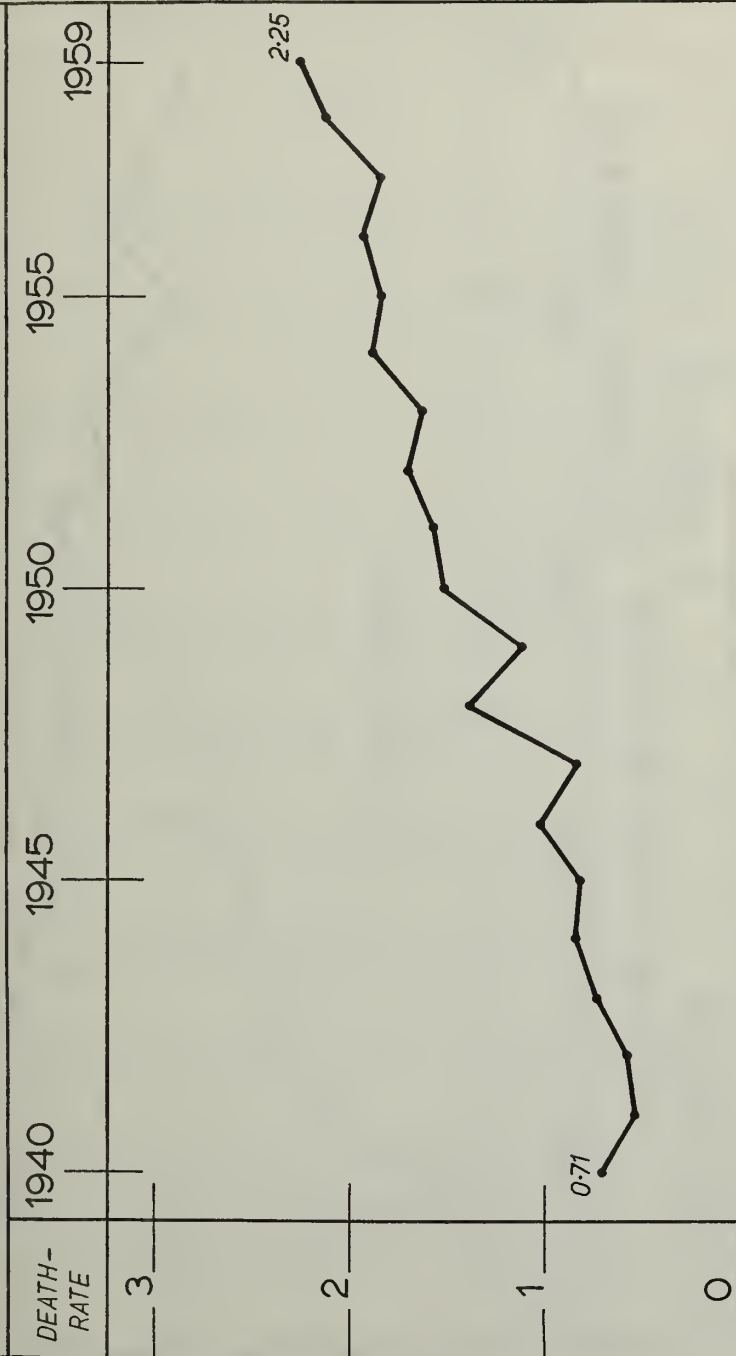
CAUSES OF AND AGES AT DEATH DURING THE CALENDAR YEAR, 1959.

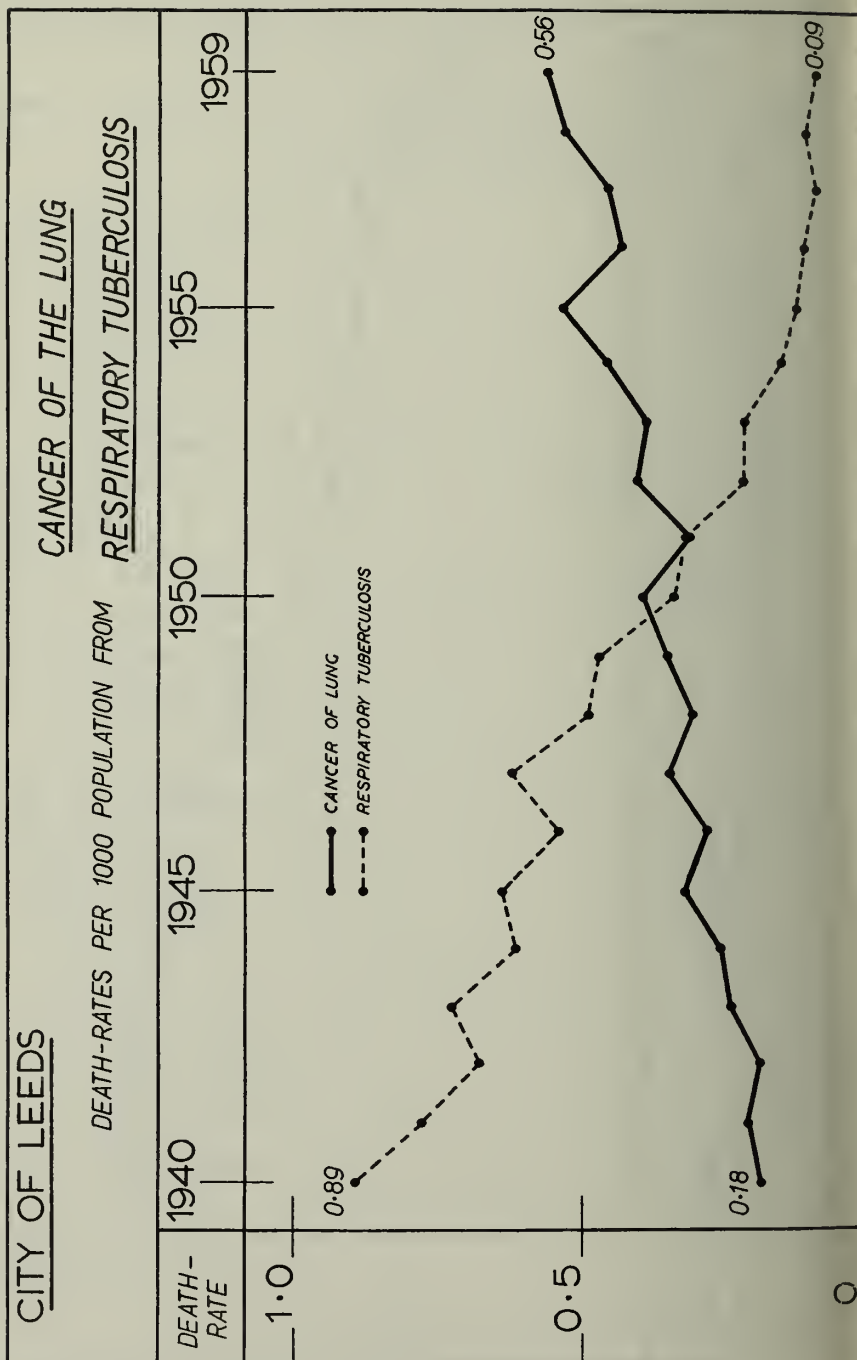
International List Nos.	Cause of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or outside the District.										*Total Hospital Deaths in the District
		All Ages	Under 1 year.	1 & under 2 years.	2 & under 5 years.	5 & under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 & under 75 years.	75 and upwards.	
001-008	Tuberculosis, respiratory ..	45	..	..	..	..	..	5	16	18	6	29
010-019	Tuberculosis, other forms ..	5	..	1	1	..	1	..	..	..	2	6
020-029	Syphilitic disease ..	13	..	..	..	..	..	..	6	5	2	7
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	1	1	..	..	..	..	..	..	..	..	1
057	Meningococcal infections ..	1	..	..	..	1	..	..	..	..	..	2
080	Acute poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	..
085	Measles ..	1	1	..	..	..	..	..	..	..	..	1
Remainder of 001-138	Other infective and parasitic diseases ..	12	3	1	..	1	..	1	4	1	1	14
	Malignant neoplasms :											
151	Stomach ..	179	..	..	..	..	..	7	62	53	57	91
162, 163	Lung, bronchus ..	290	..	..	..	..	1	10	153	95	31	139
170	Breast ..	90	..	..	..	..	..	10	44	25	11	53
171-174	Uterus ..	52	..	..	..	..	..	8	22	14	8	38
Remainder of 140-203,	Other malignant and lymphatic neoplasms ..	535	1	1	4	1	..	25	198	143	162	397
205												
204	Leukaemia, aleukaemia ..	27	..	..	3	2	2	5	8	4	3	32
260	Diabetes ..	34	..	..	..	..	..	1	5	14	14	36
330-334	Vascular lesions of central nervous system ..	802	..	..	..	..	..	4	148	214	436	491
420	Coronary disease, angina ..	1,156	..	..	..	..	..	22	376	370	388	494
440-443	Hypertension with heart disease ..	108	..	..	..	..	..	2	22	46	38	52
Remainder of 410-443	Other heart disease ..	582	1	..	..	..	4	24	116	133	304	247
444-468	Other circulatory disease ..	235	..	..	..	..	2	6	55	63	109	150
480-483	Influenza ..	62	2	..	..	..	..	3	12	17	28	28
490-493, 763	Pneumonia ..	463	21	5	1	1	4	6	51	101	273	375
500-502	Bronchitis ..	500	4	1	..	..	..	5	122	159	209	282
470-475 } 510-527 }	Other diseases of the respiratory system ..	43	1	1	..	..	..	3	14	6	18	35
540, 541	Ulcer of stomach and duodenum ..	52	..	..	..	..	..	4	12	18	18	48
543, 571 } 572, 764 }	Gastritis, enteritis and diarrhoea ..	19	3	1	1	..	..	1	4	5	4	20
590-594	Nephritis and nephrosis ..	33	..	..	..	1	3	5	13	7	4	40
610	Hyperplasia of prostate ..	22	..	..	..	..	..	..	1	..	21	23
640-689	Pregnancy, childbirth and abortion ..	4	..	..	..	..	..	4	..	..	..	7
750-759	Congenital malformations ..	58	37	2	2	6	1	6	3	..	1	64
Residual	Other defined and ill-defined diseases ..	481	127	2	5	7	8	22	83	94	133	509
E810-E835	Motor vehicle accidents ..	60	..	1	..	6	14	8	11	13	7	62
E800-E802 } E840-E962 }	All other accidents ..	95	11	1	3	3	3	12	19	13	30	70
E963												
E970-E979 } E964, E965 }	Suicide ..	55	..	..	..	..	4	15	19	11	6	7
E980-E999 }	Homicide and operations of War ..	5	..	..	..	..	..	3	1	1	..	4
	Totals ..	6,120	213	17	20	29	47	227	1,600	1,643	2,324	3,854

*Total Deaths whether of "Residents" or "Non-Residents" in Hospitals and Institutions in the District.

CITY OF LEEDS

DEATH-RATES PER 1000 POPULATION FROM CORONARY DISEASE





DEATHS IN AGE GROUPS (NETT), 1949-1959

Together with the percentage, of the total deaths, represented by each group
(in italics).

Year	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
1949	254 <i>3.9%</i>	27 <i>0.4%</i>	30 <i>0.5%</i>	46 <i>0.7%</i>	87 <i>1.3%</i>	413 <i>6.4%</i>	1,704 <i>26.4%</i>	3,890 <i>60.3%</i>	6,451
1950	250 <i>4.0%</i>	9 <i>0.1%</i>	26 <i>0.4%</i>	42 <i>0.7%</i>	60 <i>1.0%</i>	346 <i>5.5%</i>	1,609 <i>25.7%</i>	3,912 <i>62.6%</i>	6,254
1951	247 <i>3.6%</i>	20 <i>0.3%</i>	24 <i>0.4%</i>	44 <i>0.6%</i>	52 <i>0.8%</i>	327 <i>4.8%</i>	1,758 <i>25.9%</i>	4,325 <i>63.6%</i>	6,797
1952	231 <i>3.7%</i>	20 <i>0.3%</i>	32 <i>0.5%</i>	25 <i>0.4%</i>	38 <i>0.6%</i>	327 <i>5.2%</i>	1,560 <i>24.8%</i>	4,059 <i>64.5%</i>	6,292
1953	261 <i>4.4%</i>	11 <i>0.2%</i>	22 <i>0.4%</i>	30 <i>0.5%</i>	48 <i>0.8%</i>	267 <i>4.5%</i>	1,558 <i>26.4%</i>	3,700 <i>62.7%</i>	5,897
1954	198 <i>3.4%</i>	13 <i>0.2%</i>	19 <i>0.3%</i>	28 <i>0.5%</i>	30 <i>0.5%</i>	273 <i>4.7%</i>	1,546 <i>26.9%</i>	3,648 <i>63.4%</i>	5,755
1955	194 <i>3.3%</i>	17 <i>0.3%</i>	11 <i>0.2%</i>	39 <i>0.7%</i>	48 <i>0.8%</i>	273 <i>4.7%</i>	1,507 <i>25.9%</i>	3,727 <i>64.1%</i>	5,816
1956	216 <i>3.7%</i>	17 <i>0.3%</i>	17 <i>0.3%</i>	22 <i>0.4%</i>	39 <i>0.7%</i>	263 <i>4.6%</i>	1,488 <i>25.8%</i>	3,700 <i>64.2%</i>	5,762
1957	207 <i>3.6%</i>	9 <i>0.1%</i>	14 <i>0.2%</i>	34 <i>0.6%</i>	44 <i>0.7%</i>	244 <i>4.2%</i>	1,558 <i>26.8%</i>	3,711 <i>63.8%</i>	5,821
1958	218 <i>3.6%</i>	11 <i>0.2%</i>	16 <i>0.3%</i>	26 <i>0.4%</i>	38 <i>0.6%</i>	249 <i>4.2%</i>	1,512 <i>25.5%</i>	3,862 <i>65.1%</i>	5,932
1959	213 <i>3.5%</i>	17 <i>0.3%</i>	20 <i>0.3%</i>	29 <i>0.5%</i>	47 <i>0.8%</i>	227 <i>3.7%</i>	1,600 <i>26.1%</i>	3,967 <i>64.8%</i>	6,120

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	1958	1959	% of total deaths under one
010	Tuberculosis of meninges and central nervous system .. ..	..	..	..
Rest of 001-019	Tuberculosis, other forms .. ..	..	..	..
020	Syphilis .. ..	..	..	..
050	Scarlet fever .. ..	..	..	..
055	Diphtheria .. ..	..	..	..
056	Whooping Cough	1	1	0.5
057	Meningococcal infections .. ..	..	..	..
085	Measles .. ..	..	1	0.5
340	Meningitis (non-meningococcal) ..	1	1	0.5
480-483	Influenza .. ..	..	2	0.9
490-493	Pneumonia (4 weeks—I year) ..	24	18	8.5
500-502	Bronchitis	5	4	1.9
560, 561, 570	Intestinal obstruction, hernia ..	4	2	0.9
571, 572	Gastro-enteritis (4 weeks—I year)	2	2	0.9
751	Spina bifida and meningocele ..	13	7	3.3
754	Congenital malformations of cir- culatory system	17	16	7.5
750, 752, 753 }				
755-759 }	All other congenital malformations	12	14	6.6
760-761 }	Birth injuries	16	18	8.5
762 }	Post-natal asphyxia, atelectasis ..	28	27	12.7
763 }	Pneumonia of newborn (—4 weeks)	3	3	1.4
764 }	Diarrhoea of newborn (—4 weeks)	..	1	0.5
765-768 }	Other infections of newborn ..	1	..	..
770 }	Hæmolytic disease of newborn ..	1	6	2.8
769 }	Other diseases peculiar to early infancy .. ..	..	5	2.3
771-773 }				
774-776 }	Prematurity	75	59	27.7
E924 }	Accidental mechanical suffocation	1	6	2.8
Rem. of E800-999	Other violent causes	2	5	2.3
Residual	All other causes	12	15	7.0
	Totals	218	213	..

INFANT MORTALITY 1959. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	-1 day	1 day	2 days	3 days	4 days	5 days	6 days	1-2 weeks	2-3 weeks	3-4 weeks	Total -1 m'ths	1-3 m'ths	3-6 m'ths	6-9 m'ths	9-12 m'ths	Total -1 year
010 Rest of 001-019	Tuberculosis of meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
020	Tuberculosis, other forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
050	Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
055	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
056	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
057	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
085	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
340	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
480-483	Meningitis (non-meningococcal or tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
490-493	Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
500-502	Pneumonia (4 weeks—I year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
560, 561, 570	Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
571, 572	Intestinal obstruction, hernia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
751	Gastro-enteritis (4 weeks—I year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
754	Spina bifida and meningocele	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 750-759	Congenital malformations of circulatory system	2	1	..	2	..	..	..	3	4	2	12	1	1	1	1	16
760, 761	All other congenital malformations	..	1	1	1	..	..	..	..	..	..	9	3	..	1	1	14
762	Birth injuries	13	1	..	1	..	..	..	1	2	..	18	..	..	..	..	18
763	Post-natal asphyxia, atelectasis	22	3	1	..	1	..	..	..	..	..	27	..	..	..	..	27
764	Pneumonia of newborn (—4 weeks)	..	1	..	..	..	..	..	1	1	..	3	..	..	..	..	3
765-768	Diarrhoea of newborn (—4 weeks)	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1
770	Other infections of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
769, 771-773	Haemolytic disease of newborn	4	..	1	..	..	..	..	1	..	..	6	..	..	..	..	6
774-776	Other diseases peculiar to early infancy	2	..	2	6	1	1	1	..	..	..	5	..	..	..	..	5
E924	Prematurity	45	2	..	..	..	..	..	1	..	..	58	1	..	..	..	59
Rest of E800-999	Accidental mechanical suffocation	..	..	..	..	..	..	..	..	..	..	..	2	3	..	1	6
Residual	Other violent causes	1	..	..	..	..	..	..	..	..	..	1	..	2	1	1	5
	All other causes	..	1	..	..	..	1	..	..	..	..	2	3	8	..	2	15
	Totals	95	11	5	10	5	3	1	11	4	4	149	22	24	7	11	213

INFANT MORTALITY DURING THE FOURTEEN YEARS 1946-1959 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE.

YEAR.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1946	..	174	17.6	235	23.8	79	8.0	41	4.1	25	2.5	21	2.1	401	41
1947	..	178	16.4	278	25.6	125	11.5	87	8.0	41	3.8	21	1.9	552	51
1948	..	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	35
1949	..	125	14.8	156	18.5	36	4.3	29	3.4	21	2.5	12	1.4	254	30
1950	..	122	15.0	148	18.2	43	5.3	35	4.3	16	2.0	8	1.0	250	31
1951	..	125	15.5	141	17.5	36	4.5	40	5.0	19	2.4	11	1.4	247	31
1952	..	126	16.3	144	18.6	28	3.6	37	4.8	11	1.4	11	1.4	231	30
1953	..	160	20.2	182	22.9	31	3.9	21	2.6	16	2.0	11	1.4	261	33
1954	..	118	15.6	135	17.8	24	3.2	21	2.8	12	1.6	6	0.8	198	26
1955	..	123	16.1	136	17.8	19	2.5	26	3.4	7	0.9	6	0.8	194	25
1956	..	131	16.3	153	19.0	28	3.5	21	2.6	9	1.1	5	0.6	216	27
1957	..	124	14.7	150	17.8	18	2.1	23	2.7	10	1.2	6	0.7	207	25
1958	..	130	15.5	152	18.1	19	2.3	30	3.6	8	1.0	9	1.1	218	26
1959	..	130	15.6	149	17.8	22	2.6	24	2.9	7	0.8	11	1.3	213	25

MINISTRY OF HEALTH TABLES.
TABLE I.

VITAL STATISTICS OF LEEDS C.B. FOR 1959 AND PREVIOUS YEARS.

YEAR	Population estimated to Middle of each Year	BIRTHS			TOTAL DEATHS REGISTERED IN THE AREA		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE AREA			
		Un-corrected Number	Nett.		Number	Rate	Of Non-residents registered in the Area	Of Residents not registered in the Area	Under 1 Year of Age		At all Ages	
			4	Rate					Number	Rate per 1,000 Net Births	Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1941	471,930	7,027	6,667	14.1	6,610	14.0	655	501	407	61	6,456	13.7
1942	462,400	7,355	7,204	15.6	6,256	13.5	589	423	369	51	6,090	13.2
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8
1949	504,900	9,146	8,447	16.3	6,757	13.4	630	324	254	30	6,451	12.8
1950	509,700	8,857	8,113	15.9	6,437	12.6	579	396	250	31	6,254	12.3
1951	503,030	8,700	8,044	16.0	6,983	13.9	595	409	247	31	6,797	13.5
1952	504,800	8,250	7,740	15.3	6,446	12.8	597	443	231	30	6,292	12.5
1953	505,500	8,465	7,932	15.7	6,354	12.6	643	186	261	33	5,897	11.7
1954	507,200	8,185	7,584	15.0	6,224	12.3	649	180	198	26	5,755	11.3
1955	507,400	8,259	7,630	15.0	6,295	12.4	647	168	194	25	5,816	11.5
1956	508,600	8,640	8,033	15.8	6,270	12.3	693	185	216	27	5,762	11.3
	509,790*											
1957	510,100†	9,023	8,429	16.5	6,309	12.4	695	207	207	25	5,821	11.4
1958	511,600	8,995	8,379	16.4	6,393	12.5	778	317	218	26	5,932	11.6
1959	513,300	9,045	8,353	16.3	6,481	12.6	787	426	213	25	6,120	11.9

Area of Leeds C.B. } Total population at all ages at the 1951 Census 505,219

in acres (land and inland water) } 40,613.5

* Population used for calculating vital statistics to allow for change in boundary.
† Mid-year population after change in boundary.

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS DURING THE CALENDAR YEAR 1959.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital.
	At all Ages.				At Ages—Years.												
	M.	F.	M.	F.	Under 1.	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	M.	F.	M.	F.		
Diphtheria	4	5	..	..	1	2	2	3	..	..	..	..	..	..	4	5
Dysentery	873	897	76	58	330	275	225	205	45	95	116	158	62	74	46	32	
Encephalitis, acute { Infective .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
{ Post-infectious .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	29	33	..	..	..	..	1	..	..	..	9	7	13	13	7	8
Food poisoning	59	62	4	1	19	15	12	8	5	8	12	13	5	11	6	7	
Malaria	2	..	..	..	..	..	..	..	2	..	..	..	..	..	1	..
Measles	4,484	4,206	157	171	2,351	2,194	1,968	1,833	5	7	3	1	..	..	73	56
Meningococcal infections	1	2	..	..	1	1	..	1	..	..	..	..	..	..	1	1
Ophthalmia neonatorum	12	3	12	3	..	..	..	..	..	1	1	..	..	..	1	1
Paratyphoid fever	1	5	..	..	..	..	..	..	..	..	..	..	..	3	1	5
Pneumonia (acute primary)	243	237	33	20	33	31	21	31	13	9	30	30	64	49	79	70	
(acute influenza)	50	48	3	1	1	1	2	4	2	5	11	10	19	7	12	20	
Polio-myelitis	21	22	..	1	6	7	9	8	2	3	3	2	1	1	19	20	
Puerperal pyrexia	183	..	..	..	..	..	..	..	..	83	..	100	..	..	..	..
Scarlet fever	325	302	2	1	92	68	221	226	5	3	5	3	..	1	18	20	
Typhoid fever	1	1	..	..	..	..	..	..	..	..	1	1	..	..	1	1
Whooping cough	303	354	41	47	144	163	117	139	..	3	1	2	..	..	42	26
Smallpox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases	261	213	66	54	87	49	58	39	10	30	18	16	14	13	261	213	
Totals	6,669	6,573	394	357	3,065	2,804	2,653	2,406	91	250	210	343	178	172	559	465	
Respiratory tuberculosis	246(25)	134(14)	..	..	7	2	15(1)	11	25(8)	42(10)	78(11)	51(3)	84(4)	25(1)	138	63
Other forms of tuberculosis	16(1)	23(1)	..	..	3	3	4	3	1	2	6 (1)	9(1)	2	6	8	14

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1959.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.															
	At all Ages.				At Ages—Years.											
	Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.		Total Cases removed to Hospital.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Diphtheria ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Dysentery ..	851	875	317	267	223	203	43	94	116	155	61	70	18	32	36	27
Encephalitis, acute { Infective	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
{ Post-infectious	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	28	30	..	..	1	..	..	..	8	7	13	10	6	13	6	5
Food poisoning ..	85	83	7	5	30	23	11	13	16	7	14	3	4	20	11	11
Malaria ..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Measles ..	4,487	4,206	2,352	2,195	1,970	1,832	5	6	3	1	..	..	..	..	76	56
Meningococcal infections ..	5	2	4	1	..	1	..	..	..	..	..	..	1	..	4	1
Ophthalmia neonatorum ..	13	3	..	..	..	..	..	..	..	..	..	..	..	..	2	1
Paratyphoid fever ..	8	5	..	..	..	..	..	..	2	..	..	3	1	2	3	5
Pneumonia (acute primary)	283	272	50	41	24	42	16	10	34	31	66	49	49	67	119	105
(acute influenzal)	50	43	3	1	2	4	2	5	11	10	19	7	12	20	..	..
Poliomyelitis ..	8	3	1	2	3	1	..	83	2	100	1	..	..	..	6	1
Puerperal pyrexia ..	183	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever ..	321	299	2	1	90	67	5	2	5	3	..	1	..	..	14	17
Typhoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough ..	293	349	37	44	138	161	..	2	1	2	..	..	..	..	32	21
Smallpox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases ..	241	214	52	44	87	47	12	37	15	18	11	18	6	13	241	214
Totals ..	6,669	6,573	3,065	2,804	2,635	2,496	91	250	210	343	178	172	96	151	559	465
Respiratory tuberculosis ..	246(25)	134(14)	7	2	15(1)	11	25(3)	42(10)	78(11)	51(3)	84(4)	25(1)	37(1)	3	138	63
Other forms of tuberculosis ..	16(1)	23(1)	3	3	4	3	1	2	6(1)	9(1)	2	6	..	..	8	14

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. (continued).

TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH MUNICIPAL WARD OF THE DISTRICT.																														
NOTIFIABLE DISEASE.	City	Blenheim	Westfield	Wellington	Hyde Park	Kirkstall	Headingley	Meanwood	Woodhouse	Moortown	Allerton	Roundhay	Richmond Hill	Potternewton	Harehills	Burnthorpe	East Hunslet	Osmondthorpe	Cross Gates	Halton	Beeston	Holbeck	Hunslet Carr	Middleton	Armley	Wortley	Bramley	Staningley	City Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Diphtheria ..	85	104	17	23	58	31	58	58	114	99	68	25	43	117	36	55	124	33	74	14	64	30	96	87	85	21	87	20	1,726	
Dysentery
Encephalitis, ac. } Inf.
Erysipelas ..	4	3	1	..	1	3	2	3	2	4	4	1	2	1	1	1	3	2	5	4	..	2	2	6	1	58
Food poisoning ..	6	17	4	6	2	1	2	2	5	8	2	3	7	5	1	4	16	9	16	12	3	8	7	10	2	1	7	2	168	
Malaria	1
Measles ..	233	285	216	309	176	167	523	313	223	460	332	350	270	348	240	267	248	389	491	409	272	234	308	591	260	216	239	324	8,693	
Meningococcal infections	1	1	1	1	3	1	1	1	1	7	16
Ophthalmia neonatorum ..	..	1	..	..	..	3	..	..	2	..	2	2	5	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	8
Paratyphoid fever
Pneumonia (ac. primary)	22	23	12	18	11	18	11	14	12	12	14	19	16	29	14	24	26	29	79	28	8	14	15	22	32	14	12	7	555	
" (ac. influenza)	..	2	1	7	..	6	4	2	1	5	2	2	3	3	5	3	7	8	1	14	2	3	4	1	3	1	5	3	98	
Poliomyelitis ..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	2	..	1	1	1	1	2	11	183
Puerperal pyrexia..	..	1	60	113	1	..	1	..	1	1	2	1	1	1	1
Scarlet fever ..	8	18	9	16	13	33	34	17	14	35	30	10	16	21	12	13	21	18	57	25	33	24	46	29	13	6	20	29	620	
Typhoid fever
Whooping cough ..	35	32	12	23	10	7	11	47	26	30	25	3	10	30	13	15	24	9	100	25	10	18	25	60	9	24	6	3	642	
Smallpox
Non-notifiable diseases ..	48	32	15	2	13	14	13	11	15	15	11	7	33	24	6	13	15	24	54	10	7	22	9	16	7	2	7	10	455	
Totals ..	441	518	347	404	284	283	658	468	416	668	491	423	519	583	330	397	484	522	880	545	401	356	514	825	414	285	386	400	13,242	
Respiratory tuberculosis ..	14(1)	19(2)	18(4)	11(2)	10(1)	10	6(3)	15(3)	13(1)	15	9(1)	17(1)	9	20(1)	10	14(1)	10	22	25(3)	7(1)	9	14(2)	13	15(2)	10	14(3)	13(8)	18(4)	380(39)	
Other forms of tuberculosis	1	3(1)	1	1	1	2	1	1	2(1)	1	..	..	..	..	1	3	1	2	3	3	1	..	4	1	3	1	..	..	39(2)

The figures shown in brackets are "Transfer in" Cases and are included in totals.

CITY OF LEEDS

VITAL STATISTICS 1920 - 1959

	Population	Births	Birth-Rate	Deaths	Death-Rate	INFANT MORTALITY			STILL-BIRTHS		MATERNAL MORTALITY				DIARRHOEA AND ENTERITIS		TUBERCULOSIS (All Forms)		CANCER		Deaths from Respiratory Diseases (inc. Influenza but excl. Pul. Tub.)	DIPHTHERIA			SCARLET FEVER		TYPHOID FEVER		MEASLES		WHOOPIING COUGH	
						Deaths — 1 year	Rate per 1,000 live births	Neo-Natal Mortality Rate	No.	Rate per 1,000 population	Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 2 years	Death-Rate per 1,000 births	Deaths	Death-Rate	Deaths	Death-Rate		Cases	Deaths	No. of persons immunised	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1920	448,913	11,229	25.0	6,591	14.7	1,232	110	46.3	..	..	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,513	885	64	..	1,363	17	29	4	5,459	148	..	100
1921	465,500	10,144	21.8	6,285	13.5	997	98	41.3	..	..	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,360	665	38	..	1,526	14	24	2	209	5	..	72
1922	466,700	9,253	19.8	6,479	13.9	935	101	43.3	..	..	14	18	32	3.46	92	9.9	653	1.40	595	1.27	1,357	470	28	..	2,722	33	14	7	9,932	152	..	115
1923	469,900	8,684	18.5	5,986	12.7	773	89	41.8	..	..	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,179	368	20	..	2,134	31	9	1	4,683	50	..	32
1924	471,600	8,558	18.1	6,747	14.3	921	108	38.7	..	..	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,777	289	27	..	1,256	20	25	6	6,654	46	..	87
1925	472,900	8,180	17.3	6,037	12.8	748	91	37.8	..	..	24	21	45	5.50	149	18.2	599	1.27	606	1.28	1,262	422	39	..	1,166	15	9	3	5,100	39	..	47
1926	473,400	8,065	17.0	6,062	12.8	748	93	38.7	..	..	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,099	374	26	..	756	5	9	1	7,076	19	..	119
1927	477,600	7,790	16.3	6,198	13.0	629	81	35.2	..	..	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	439	28	..	773	6	14	2	8,569	117	..	44
1928	474,800	7,665	16.1	6,133	12.9	606	79	37.3	..	..	14	22	36	4.70	105	13.7	542	1.14	698	1.47	976	634	21	94	3,515	18	6	1	3,638	21	..	36
1929	478,500	7,426	15.5	7,898	16.5	722	97	42.3	†369	0.77	10	23	33	†4.23	86	11.6	621	1.30	684	1.43	2,037	536	26	107	3,473	29	14	3	9,486	102	..	107
1930	478,500	7,568	15.8	5,930	12.4	512	68	38.5	332	0.69	10	22	32	4.05	34	4.5	533	1.11	728	1.52	798	994	54	179	2,383	23	4	2	913	2	..	32
1931	486,400	7,219	14.8	6,506	13.4	552	76	32.3	367	0.75	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10	2	10,955	56	..	43
1932	484,900	7,004	14.4	6,469	13.3	617	88	36.4	334	0.69	8	13	21	2.86	106	15.1	493	1.02	760	1.57	966	889	48	1,524	931	8	9	..	3,540	52	..	41
1933	485,000	6,643	13.7	6,574	13.6	537	81	36.6	333	0.69	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	726	1,906	9	10	1	3,973	22	..	28
1934	486,250	7,190	14.8	6,291	12.9	513	71	35.0	320	0.66	15	14	29	3.86	76	10.6	462	0.95	801	1.65	711	2,231	156	2,452	2,711	16	8	1	10,576	90	..	25
1935	487,200	7,211	14.8	6,432	13.2	463	64	33.1	334	0.69	8	16	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,062	2,082	5	5	..	1,341	4	..	48
1936	489,800	7,340	15.0	6,666	13.6	476	65	30.0	320	0.65	10	14	24	3.13	71	9.7	408	0.83	843	1.72	803	799	36	1,937	1,868	12	4	..	8,744	49	..	28
1937	491,860	7,279	14.8	6,573	13.4	491	67	33.2	313	0.64	6	11	17	2.24	65	8.9	406	0.83	777	1.58	959	941	44	1,135	2,234	5	16	3	2,373	9	..	19
1938	494,000	7,614	15.4	6,255	12.7	490	64	33.1	329	0.67	2	12	14	1.76	94	12.3	397	0.80	879	1.78	625	948	33	11,172	1,717	8	3	..	6,797	18	..	13
1939	(a) 497,000	7,079	14.2	6,535	13.4	401	57	30.2	307	0.62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	12	1	1,673	2	132	18
1940	(b) 488,000	6,946	14.9	6,918	14.9	395	57	30.8	282	0.61	2	13	15	2.09	44	6.4	467	1.00	778	1.67	990	301	11	1,167	643	..	35	1	4,364	8	128	2
1941	471,930	6,667	14.1	6,456	13.7	407	61	26.7	259	0.55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	576	22	13,208	887	3	12	1	7,006	21	2,105	25
1942	462,400	7,204	15.6	6,090	13.2	369	51	29.7	278	0.60	6	13	19	2.54	32	4.4	357	0.77	888	1.92	589	707	25	15,101	1,576	1	8	..	7,810	10	1,554	32
1943	453,900	7,547	16.6	6,358	14.0	356	47	23.7	250	0.55	4	15	19	2.44	40	5.3	378	0.83	906	2.00	808	334	11	19,415	1,998	3	2	..	2,426	14	1,284	14
1944	451,100	8,518	18.9	6,124	13.6	429	50	28.4	262	0.58	..	12	12	1.37	76	8.9	316	0.70	915	2.03	608	254	9	7,483	1,913	3	5	1	678	..	1,213	6
1945	451,670	7,760	17.2	6,410	14.2	438	56	28.6	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.15	740	149	2	7,510	1,190	..	3	1	9,480	21	590	10
1946	481,570	9,886	20.5	6,614	13.7	401	41	23.8	299	0.62	4	8	12	1.18	53	5.4	288	0.60	960	1.99	719	132	6	9,822	964	..	4	..	895	1	1,635	13
1947	492,140	10,875	22.1	6,793	13.8	552	51	25.6	306	0.62	1	8	9	0.81	122	11.2	342	0.70	947	1.92	887	51	1	8,773	1,372	1	5	1	6,791	19	1,311	19
1948	501,900	9,234	18.4	5,902	11.8	321	35	17.5	219	0.44	..	2	2	0.22	61	6.6	277	0.55	959	1.91	714	29	1	10,338	1,578	..	..	..	3,967	4	1,556	6
1949	504,900	8,447	16.7	6,451	12.8	254	30	18.5	200	0.40	1	8	9	1.04	13	1.5	274	0.54	1,006	1.99	940	5	..	8,665	786	1	..	..	5,260	5	1,918	6
1950	509,700	8,113	15.9	6,254	12.3	250	31	18.2	189	0.37	1	4	5	0.60	13	1.6	193	0.38	1,062	2.08	763	20	1	7,464	566	..	..	..	5,663	2	2,409	6
1951	503,030	8,044	16.0	6,797	13.5	247	31	17.5	194	0.39	1	4	5	0.61	7	0.9	182	0.36	1,021	2.00	1,272	2	..	8,154	524	..	..	..	7,669	3	1,625	4
1952	504,800	7,740	15.3	6,292	12.5	231	30	18.6	182	0.36	1	5	6	0.76	7	0.9	123	0.24	1,071	2.12	1,006	2	..	7,456	794	..	..	..	4,915	3	1,637	..
1953	505,500	7,932	15.7	5,897	11.7	261	33	22.9	167	0.33	2	3	5	0.62	13	1.6	120	0.24	991	1.96	1,023	1	..	6,510	699	..	..	..	6,825	4	1,769	1
1954	507,200	7,584	15.0	5,755	11.3	198	26	17.8	188	0.37	1	4	5	0.64	8	1.1	87	0.17	1,030	2.03	808	..	..	6,857	622	1	..	..	701	..	812	..
1955	507,400	7,630	15.0	5,816	11.5	194	25	17.8	173	0.34	..	4	4	0.51	9	1.2	70	0.14	1,072	2.11	786	..	..	6,189	603	..	..	..	11,243	3	563	..
1956	508,600	8,033	15.8	5,762	11.3	216	27	19.0	177	0.35	..	5	5	0.61	11	1.4	64	0.13	986	1.94	897	..	..	6,660	426	..	..	..	983	..	1,383	2
1957	510,100	8,429	16.5	5,821	11.4	207	25	17.8	181	0.36	..	3	3	0.35	2	0.2	52	0.10	1,069	2.10	768	..	..	5,904	465	..	..	..	9,968	3	575	1
1958	(c) 509,790	8,379	16.4	5,932	11.6	218	26	18.1	202	0.39	2	5	70	0.82	2	0.2	56	0.11	1,066	2.08	867	1	..	5,808	678	..	1	..	806	..	698	1
1959	513,300	8,353	16.3	6,120	11.9	213	25	17.8	170	0.33	1	3	4	0.47	4	0.5	50	0.10	1,173	2.29	1,006	1	..	5,820	620	..	..	..	8,693	1	642	1

a for calculation of birth-rate
b for calculation of death-rate,
c for calculation of vital statistics.

†Registration of Still-births
in force 1929

†1929 and onwards per 1,000
total births (live and still)
© Includes 2 non-residents not transferable

||Whooping Cough made notifiable by Measles
and Whooping Cough Regulations, 1939
(In force 23rd October 1939.)

Infectious and other Diseases

INFECTIOUS AND OTHER DISEASES

BY

G. E. WELCH, M.B., B.S., D.P.H.,

Deputy Medical Officer of Health,

Deputy School Medical Officer.

In contrast to 1958, poliomyelitis was less prevalent than in any year since 1948, this low incidence being general throughout the country. The expected epidemic of measles occurred and there was a considerable increase in the amount of dysentery, the total number of cases being the highest ever recorded. One case of diphtheria occurred, the first bacteriologically confirmed case since 1953.

Once again it is a pleasure to record thanks to Dr. G. B. Ludlam and his staff at the Public Health Laboratory for much help and advice during the year.

Diphtheria.—The case of diphtheria was in a girl of 5 years and *C. diphtheriae mitis* was isolated. The child had been immunised in her first year of life by the family doctor, who had given three doses of T.A.F. at weekly intervals. The recommended interval between injections of this material is one month and so it seems likely that the effective dose given was equivalent to only one injection of T.A.F. and was sufficient to create only a slight degree of immunity.

All class and home contacts of the patient were traced and offered primary immunisation or boosting against diphtheria, whichever was appropriate.

Scarlet Fever.—There was a decrease in the number of accepted cases of this disease during the year, 620 as compared with 678 in 1958 and 465 in 1957. Of the 620 cases, 31 (5.0 per cent.) were treated in Seacroft Hospital. The case-rate was 1.21 as compared with 1.33 for the previous year. The disease continues to be mild. There were no deaths.

Smallpox, Typhoid and Paratyphoid Fevers, Typhus, Plague and Cholera.—No case of smallpox, typhoid fever, typhus, plague or cholera occurred during the year. Three smallpox contacts were kept under observation. There were 8 cases of paratyphoid B fever. These are reported on as follows.

(1) A small outbreak of paratyphoid fever—5 cases, all adult females—occurred during May/June in one of the wards at a general hospital in the city. All the cases were transferred to Seacroft Infectious Diseases Hospital. The source of infection is not known but it is thought to have been from one of the patients who was admitted to the ward in April for an operation to make a permanent colostomy. On discovery of the first case, routine fæcal testing of the other patients and staff was performed and a further four patients were found to be suffering from the disease. In addition, a positive result was obtained from a nurse who had travelled to Ireland before the result was known. The Medical Officer of Health of her home town was notified and it was subsequently learnt that she developed a clinical infection. No person was subsequently discharged from the ward in question until three consecutive negative fæces and urine specimens had been obtained. Home visits were made to each person after discharge and two further fæces and urine specimens arranged. Those persons discharged before the discovery of the first case were also visited and fæces and urine specimens obtained. All these specimens gave negative results. All cases were Phage Type 1.

This outbreak illustrates the current epidemiological features of Paratyphoid B infection. On a national scale the number of outbreaks associated with food has decreased and the number which can be traced to contact with a case or carrier has increased.

(2) The other three cases, two Phage Type Taunton and one Phage Type 1, were in private households. All were males, aged 37, 82 and 39 years respectively. These cases were also admitted to Seacroft Hospital. In case No. 1 the patient was admitted to hospital as "pyrexia of unknown origin" and was at first thought to be septicæmia until bacteriological tests showed that he was suffering from Paratyphoid fever (Phage Type Taunton). The source of infection is not known. Fæces and urine specimens obtained from the man's wife and child were negative. Case No. 2 was diagnosed in Seacroft Hospital on a positive blood culture (Phage Type 1). The patient lived alone and the source of infection could not be ascertained.

In case No. 3 the infection had probably been contracted in Dungarvan, Ireland, from where the patient had come to Leeds approximately 10 days before the onset of illness and where there

had been an outbreak of Paratyphoid fever ; Phage Type Taunton was isolated in this case, the same type as that identified in the Dungarvan cases.

One symptomless excreter of Paratyphoid B was discovered during the year, a boy aged 7 years. Hospital treatment was not necessary and within four weeks three consecutive negative *fæces* specimens were obtained. The Central Enteric Reference Laboratory reported this culture as belonging to Phage Type Scarborough.

During the year 9 typhoid and paratyphoid fever contacts were kept under observation as were four chronic typhoid carriers.

During the year 6 "other cases" were referred to the Department by medical practitioners for a second opinion ; these were visited and diagnosed as follows :—chickenpox (1), scarlet fever (2), ? virus infection (1) and urticaria (2).

Measles.—The epidemic expected this year commenced in January and continued until the end of June. The peak was reached during the week ended March 14th when 596 cases were notified. The total number of accepted cases during the year was 8,693 as compared with 806 last year and 9,968 in 1957. Of the total cases, 132 were treated in Seacroft Hospital. There was one death.

Whooping Cough.—There was a slight decrease in the number of accepted cases of this disease during the year, 642 as compared with 698 last year and 575 in 1957. Of the total cases, 53 (8·3 per cent.) were treated in Seacroft Hospital. There was one death, a boy aged two months.

Puerperal Pyrexia.—There was an increase in the number of accepted cases of puerperal pyrexia during the year, 183 as compared with 121 last year and 152 in 1957. Of the total, 172 (94·0 per cent.) occurred in hospitals and institutions and 11 (6·0 per cent.) in the practices of general medical practitioners and midwives. No case required treatment in Seacroft Hospital. There were no deaths.

Ophthalmia Neonatorum.—The number of accepted cases of ophthalmia neonatorum during the year was 16 as compared with 10 last year and 13 in 1957. Three cases were admitted to Seacroft Hospital. All cases recovered.

Erysipelas.—Accepted cases of this disease numbered 58 as compared with 40 in 1958. Of these, 11 (19·0 per cent.) were treated in Seacroft Hospital. There were no deaths.

Malaria.—One case of malaria was notified during the year and received treatment in Seacroft Hospital. The infection was contracted abroad.

Dysentery.—The incidence of this disease reached a new high level during the year. Accepted cases totalled 1,726 as compared with 1,260 last year and 1,042 in 1957. This is the highest number of cases yet recorded. The disease was mainly of the *Sonne* type. There was one death. Of the 1,726 cases, 1,520 occurred at home, 50 in hospitals and institutions and 156 in day nurseries. The number treated in Seacroft Hospital was 63 or 3·7 per cent. of the total. Of the cases, 781 were *Sonne* and one *Flexner* whilst the remaining 944 were not typed. Outbreaks of *Sonne* dysentery again occurred in a number of day nurseries and these accounted for 151 cases (122 children and 29 staff). One of the children was removed to Seacroft Hospital. Sporadic cases also occurred during the year at three day nurseries and five hospitals and institutions. All the day nursery cases were bacteriologically confirmed and all recovered.

In January/February, 18 cases of *Sonne* dysentery occurred amongst the patients in one of the wards of a mental hospital in the city. One member of the staff was also affected.

In February/March a small outbreak of *Sonne* dysentery occurred in the nursery section at a Children's Home; 11 children and 2 staff were affected. Nine of the children were removed to Seacroft Hospital. All the cases recovered.

Between January and April, 14 cases of *Sonne* dysentery occurred amongst the patients in a general hospital in the city; 4 of the patients were removed to Seacroft Hospital.

Acute Poliomyelitis (including Polioencephalitis).—The number of cases of poliomyelitis fell considerably as compared with last year. In the absence of controls, it is not possible to say whether or not last year's intense vaccination campaign was in any way responsible for the fall in incidence.

Accepted cases totalled only 11 as compared with 95 last year. This is the lowest figure since 1948 (6 cases). Of the 11 cases (all paralytic), 7 (63·6 per cent.) were admitted to Seacroft Hospital and 4 (36·4 per cent.) were treated at home. There were no deaths. The monthly incidence is as follows.

January	..	..	I
February	..	..	2
March ..	..	..	I
April ..	..	..	I
May ..	..	..	2
June ..	..	..	2
September	..	..	2

—
II
=

Cases and deaths for the past five years are as follows :—

Year	Cases	Deaths
1958 ..	95	3
1957 ..	41	I
1956 ..	23	—
1955 ..	60	2
1954 ..	25	—

AGE AND SEX INCIDENCE AND TYPE OF DISEASE

Age (years)	0-4	5-9	10-14	15-24	25-34	35-44	Over 45	Totals
Paralytic :—								
Males	2	3	..	..	I	I	I	8
Females ..	2	..	I	..	..	..	..	3
Non-paralytic :—								
Males .. ..	..	..	..	..	..	..	..	..
Females ..	..	..	..	..	..	..	..	..
Totals ..	4	3	I	..	I	I	I	II

Of the 87,156 children in Leeds inoculated against poliomyelitis since 1956, 5 developed the disease (all paralytic cases). Three had received 2 injections and two 3 injections. Two of the five cases were treated in Seacroft Hospital and the other three at home. Four cases have completely recovered and one is left with weakness of the muscles of both legs, necessitating the wearing of a caliper on the left leg.

As the proportion of vaccinated individuals rises, the relative incidence of paralysis in the vaccinated compared to unvaccinated must also rise even though the total number of cases may fall. This is a corollary of the well-known fact that polio vaccines at present in use do not give complete protection to all of those vaccinated.

Of the total cases (11, all paralytic), 9 recovered completely, one was left with slight paralysis or weakness and one was left with severe paralysis. The latter was a boy of 6 years. Virological tests in all cases gave negative results.

Of the 28 wards in the city, 9 contributed to the number of cases as follows:—Armley (1), Beeston (2), Bramley (1), Crossgates (1), Halton (1), Hunslet Carr (1), Potternewton (1), Stanningley (2) and Woodhouse (1).

Individual case record cards on all notified cases of poliomyelitis were again forwarded to the Medical Research Council.

Acute Encephalitis.—No case of this disease was notified during the year. There was one death.

Meningococcal Infection.—There were 7 accepted cases of meningococcal infection during the year as compared with 6 last year. 5 cases were treated in Seacroft Hospital. There was one death.

Food Poisoning.—The number of accepted cases of food poisoning or suspected food poisoning during the year was 168 as compared with 165 last year and 632 in 1957. Of the total, 105 proved to be *Salmonella* infections; of these 31 were admitted to Seacroft Hospital. There were no deaths.

The *Salmonella* organisms isolated were as follows:—

<i>Salmonella</i>	typhi-murium	..	..	69
„	breddeney	..	..	10
„	give	..	..	10
„	thompson	..	..	4
„	dublin	..	..	2
„	meleagridis	..	..	2
„	anatum	..	..	1
„	heidelberg	..	..	1
„	infantis	1
„	muenchen	1
„	schwarzengrund	1
„	senftenberg	1
„	stanley	1
„	tennessee	1

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In September, 1959, the Enteric Reference Laboratory in London commenced routine phage typing on strains of *Salmonella typhi-murium* and from that date cultures were sent by Dr. Ludlam of the Public Health Laboratory, Leeds, to the Reference Laboratory for typing. The great variety of types encountered so far is very striking and over a period of time it is hoped that much valuable information will be obtained. During the year 20 persons were found on faecal testing to be symptomless excretors of *Salmonella* organisms.

Included in the total cases of actual or suspected food poisoning were 63 cases which occurred in different households and which were bacteriologically negative. None of these cases required admission to hospital and there were no deaths.

Two outbreaks of suspected food poisoning were reported to the Department during the year as follows:—(1) In February, 43 members of the staff of a large store in the city were reported to have been taken ill following a meal eaten in the store canteen. Samples of various foodstuffs were taken for examination and all were bacteriologically satisfactory. Nasal and faecal specimens obtained from some of the staff affected gave negative results. The quality of the foodstuffs, the food-handling methods and equipment of the food-handling rooms at this store all conformed to the best standards. Although the outbreak must be regarded as one of mild food poisoning, the causative organism was not isolated. All quickly recovered.

(2) In September, a report was received from an engineering works in the city that 39 of their employees had been affected with colic and diarrhoea following consumption of a canteen lunch. The incubation period was between 7 and 12 hours. Investigations were immediately made and it was ascertained that the only common items of food eaten by those affected were mutton and gravy. Among those affected were five members of the kitchen staff. About 190 workpeople and staff had lunch in the canteen of whom approximately 80 had eaten mutton and gravy. Ten samples of the various foods in the luncheon menu were taken for bacteriological examination but no food poisoning organisms were isolated. In four of the foods, i.e. mutton, gravy, dripping and custard, the predominant organism proved to be *enterococci*; the remaining items were all virtually sterile. A London firm of caterers are

responsible for the catering at this firm and one of their representatives together with a consultant bacteriologist engaged by the firm also attended to make investigations into the cause of the outbreak. On examination of the kitchen it was found that some of the conditions involving food-handling and storage were unsatisfactory. Certain improvements, among them structural changes, were suggested to the management and an undertaking was obtained that these would be carried out. A number of faeces specimens and a swab from a lesion on a finger of the chef were obtained but all were negative for food poisoning organisms. The precise cause of the illness was not traced. All the cases recovered.

Salmonellosis continues to be the main food poisoning problem in this country. In addition to directing publicity towards clean food handling, efforts are now being made to break the chain of infection at other levels. The most promising of these appears to be in the elimination of *salmonellæ* from certain animal foodstuffs.

Influenza.—There were 62 deaths from influenza during the year as compared with 9 in 1958. The death-rates per thousand population were 0·12 and 0·02 respectively.

Pneumonia.—Accepted cases during the year numbered 653, of which 555 (85·0 per cent.) were primary and 98 (15·0 per cent.) influenzal. The corresponding figures for 1958 were 370, of which 338 (91·4 per cent.) were primary and 32 (8·6 per cent.) influenzal. There were 463 deaths from all forms of pneumonia (including 3 deaths from pneumonia of the newborn) as compared with 383 last year. The mortality rates were 0·90 and 0·75 respectively.

Bronchitis.—There were 500 deaths assigned to this disease as compared with 430 in the previous year. The death-rates were 0·97 and 0·84 respectively.

Diarrhoea and Enteritis.—The number of deaths of children under two years of age from diarrhoea and enteritis during 1959 was 4 as compared with 2 last year. The death-rates per thousand live births were 0·48 and 0·24 respectively.

Incidence of Blindness.—I am indebted to the Welfare Services Officer for the following statistical information regarding the admission of persons to the Register of the Blind and Partially Sighted during the year.

A. FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY SIGHTED PERSONS.

(i) Number of cases registered during the year in respect of which para. 7 (c) of Forms B.D.8 recommends :— (a) No treatment (b) Treatment (medical, surgical or optical) ..	CAUSE OF DISABILITY			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
	20	7	..	61
..	43	17	..	53
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment	22	12	..	40

B. OPHTHALMIA NEONATORUM.

(i) Total number of cases notified during the year	16
(ii) Number of cases in which :—	
(a) Vision lost .. ..	..
(b) Vision impaired .. ..	..
(c) Treatment continuing at end of year .. ..	..

Venereal Diseases.—The number of deaths assigned as due to venereal diseases was 13 which is equal to a death-rate of 0.03 per thousand of the population. The corresponding figures for 1958 were 20 and 0.04 respectively. For details of the work of the Treatment Centre at Leeds General Infirmary, see page 101.

Malignant and Lymphatic Neoplasms.—The appended table gives details of deaths assigned to malignant and lymphatic neoplasms. The total of 1,173 deaths in this group of diseases is 107 more than last year's total.

1959 Cause of Death*	Age Groups																		All Ages		Grand Total
	-1		1-		2-		5-		15-		25-		45-		65-		75-				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Malignant Neoplasms :																					
Buccal cavity and pharynx (140-148)	1	..	2	4	6	..	4	3	13	7	20
Oesophagus (150)	5	6	6	3	4	5	15	14	29
Stomach (151)	3	4	39	23	37	16	22	37	101	80	181
Other digestive organs (152-159)	4	5	38	48	25	40	27	51	94	144	238
Trachea, lung and bronchus (162-163)	1	..	7	3	129	24	79	16	22	9	238	52	290
Other respiratory organs (160, 161, 164, 165)	4	..	3	..	2	1	9	1	10
Breast (170)	10	1	43	..	25	..	11	1	89	90	90
Cervix uteri (171)	6	..	10	..	9	..	6	..	31	31	31
Other parts of uterus (172-174)	2	..	12	..	5	..	2	..	21	21	21
Male genital organs (177-179)	2	..	5	..	13	..	14	..	34	..	34
Skin (190-191)	3	2	1	1	1	1	5	4	9
Bone and connective tissue (196-197)	2	1	2	..	2	1	6	2	8
All other sites (Rem. of 140-199)	1	1	..	2	2	1	..	..	3	6	26	37	19	17	15	27	67	90	157
Neoplasms of lymphatic tissues (200-203)	2	2	9	6	5	2	1	1	17	11	28
Leukæmia and aleukæmia (204)	3	..	1	1	2	..	4	1	6	2	2	2	1	2	19	8	27
Mycosis fungoides (205)
Total	1	1	..	5	2	2	1	3	..	26	39	269	218	198	136	115	157	619	554	1,173

*International List Numbers are shown in brackets.

Tuberculosis

TUBERCULOSIS STATISTICS

The number of cases on the register at the end of 1959 was 3,441 as compared with 3,503 at the end of 1958, a decrease of 62.

Notifications.—During the year 380 cases of respiratory tuberculosis (of which 39 were transfers from other areas) and 39 non-respiratory (of which 2 were transfers from other areas) were notified, making a total of 419 cases of which 41 were transfers. Compared with the previous year there was an increase of 15 in the respiratory notifications and an increase of 18 in the non-respiratory notifications. Compared with the average of the previous five years there was a decrease of 61 in the respiratory notifications and a decrease of 19 in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.74, of non-respiratory 0.08 and of all forms of the disease 0.82 as compared with 0.71, 0.04 and 0.75 respectively for the previous year.

Of the total cases of respiratory tuberculosis, 9.2 per cent. were children under 15 years, 17.6 per cent. persons between 15 and 25 years and 73.2 per cent. were in the remaining age groups. The corresponding figures for the previous year were 10.4 per cent., 18.1 per cent. and 71.5 per cent. respectively.

With regard to the non-respiratory type of disease, 33.3 per cent. were children under 15 years and 66.7 per cent. were persons over 15 years. The corresponding figures for the previous year were 23.8 per cent. and 76.2 per cent. respectively.

Of the total cases, 289 were notified by the Chest Physician, 34 were notified by general medical practitioners, 55 came from hospitals and 41 were transfers from other areas.

The number of cases of respiratory tuberculosis not heard of until time of death was 17 (including 3 posthumous notifications) and the number of non-respiratory 5 (including one posthumous notification), making a total of 22, a decrease of 4 on the figure for the previous year.

Out of a total of 50 deaths from all forms of tuberculosis, 2 or 4.0 per cent. died within 28 days of notification (none within 7 days) and 5 died between 28 days and 12 months after notification.

The following tables give details of notifications of tuberculosis received during the year.

RESPIRATORY.

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	7	15 (1)	25 (8)	38 (7)	40 (4)	33 (2)	51 (2)	37 (1)	246 (25)
Females	..	2	11	42 (10)	23 (2)	28 (1)	17 (1)	8	3	134 (14)
Totals	..	9	26 (1)	67 (18)	61 (9)	68 (5)	50 (3)	59 (2)	40 (1)	380 (39)

NON-RESPIRATORY.

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	3	4	1	4 (1)	2	2	..	..	16 (1)
Females	..	3	3	2	6	3 (1)	5	1	..	23 (1)
Totals..	..	6	7	3	10 (1)	5 (1)	7	1	..	39 (2)

Figures in brackets are 'Transfer In' cases and are included in the totals.

Site	Males	Females	Total
Central nervous system	5	2	7
Abdominal	2	1	3
Spine	1	1	2
Bones and joints	3	2	5
Skin	..	..	..
Lymphatic system	4	10	14
Genito-urinary system..	1	7	8
Other sites	..	..	..
Totals ..	16	23	39

Deaths.—Deaths from all forms of tuberculosis during the year numbered 50 of which 40 were males and 10 females. In the previous year the total was 56 of which 42 were males and 14 females. Of the total, respiratory tuberculosis accounted for 45 or 90.0 per cent. and non-respiratory 5 or 10.0 per cent. The death-rate from respiratory tuberculosis was 0.09, from non-respiratory 0.01 and from all forms of the disease 0.10 as compared with 0.11, 0.00 and 0.11 respectively for the previous year.

Set against the average rates for the previous five years, the figures represent a decrease of 0.03 in the respiratory rate, no change in the non-respiratory rate and in the rate for all forms of the disease a decrease of 0.03.

RESPIRATORY TUBERCULOSIS.
AGES AT DEATH.

1959	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	2	5	8	21	36
Females	3	2	1	3	9
Totals	5	7	9	24	45
Average 10 years 1949-1958	..	1	..	6	16	19	25	24	21	112

NON-RESPIRATORY TUBERCULOSIS. DEATHS.

1959	Tubercular meningitis	Abdominal	Bones and Joints	Other tuber- culosis	Total
Males ..	2	1	..	1	4
Females ..	..	1	..	..	1
Totals ..	2	2	..	1	5

AGES AT DEATH.

1959	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	2	..	1	..	..	..	..	1	4
Females	1	1
Totals	2	..	1	..	..	..	..	2	5
Average 10 years 1949-1958	..	2	1	1	1	1	1	1	1	9

The following table gives details of notifications of and deaths from tuberculosis during the years 1938-1959 :—

TUBERCULOSIS.

YEAR.	DEATHS.						NOTIFICATIONS.					
	Respiratory tuberculosis.		Non-respiratory tuberculosis.		All forms tuberculosis.		Respiratory tuberculosis.		Non-respiratory tuberculosis.		All forms tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Cases.	Case-rate.	Cases.	Case-rate.	Cases.	Case-rate.
1938	336	0.68	61	0.12	397	0.80	511	1.03	176	0.36	687	1.39
1939	353	0.72	60	0.12	413	0.85	555	1.14	137	0.28	692	1.42
1940	416	0.89	51	0.11	467	1.00	557	1.20	110	0.24	667	1.43
1941	362	0.77	46	0.10	408	0.86	598	1.27	162	0.34	760	1.61
1942	310	0.67	47	0.10	357	0.77	638	1.38	170	0.37	808	1.75
1943	325	0.72	53	0.12	378	0.83	595	1.31	151	0.33	746	1.64
1944	277	0.61	39	0.09	316	0.70	631	1.40	157	0.35	788	1.75
1945	286	0.63	32	0.07	318	0.70	579	1.28	156	0.35	735	1.63
1946	261	0.54	27	0.06	288	0.60	519	1.08	178	0.37	697	1.45
1947	305	0.62	37	0.08	342	0.70	518	1.05	133	0.27	651	1.32
1948	245	0.49	28	0.06	273	0.55	497	0.99	132	0.26	629	1.25
1949	244	0.48	30	0.06	274	0.54	480	0.95	108	0.21	588	1.16
1950	178	0.35	15	0.03	193	0.38	521	1.02	98	0.19	619	1.21
1951	166	0.33	16	0.03	182	0.36	476	0.95	104	0.21	580	1.15
1952	113	0.22	10	0.02	123	0.24	476	0.94	97	0.19	573	1.14
1953	111	0.22	9	0.02	120	0.24	420	0.83	91	0.18	511	1.01
1954	83	0.16	4	0.01	87	0.17	470	0.93	80	0.16	550	1.08
1955	67	0.13	3	0.01	70	0.14	488	0.96	85	0.17	573	1.13
1956	56	0.11	8	0.02	64	0.13	484	0.95	62	0.12	546	1.07
1957	47	0.09	5	0.01	52	0.10	397	0.78	41	0.08	438	0.86
1958	54	0.11	2	0.00	56	0.11	365	0.71	21	0.04	386	0.75
1959	45	0.09	5	0.01	50	0.10	380	0.74	39	0.08	419	0.82

REPORT ON THE WORK OF THE TUBERCULOSIS DEPARTMENT OF THE LEEDS CHEST CLINIC

BY

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Epidemiology.—*General.*—The epidemiological features noted in last year's report continue to have effect, the death-rate from tuberculosis of all forms continuing to decline whilst the notification rate remained steady and showed a slight increase. The breakdown of the Tuberculosis Register is shown in Table 1, from which it is seen that although the notification of new cases has increased slightly, the total number on the Register is 62 less than at the end of the previous year. The variation of the death and notification rates in 1959 compared to 1958 is shown in Table 2.

	Respiratory			Non-Respiratory			Total M. & F.
	M.	F.	Total	M.	F.	Total	
ON REGISTER AT 31.12.58 ..	1,743	1,291	3,034	226	243	469	3,503
ADDED TO REGISTER :							
Cases notified in 1959 ..	221	120	341	15	22	37	378
Transfer-in cases	25	14	39	1	1	2	41
Cases returned	4	4	8	..	..	..	8
Totals	250	138	388	16	23	39	427
TAKEN OFF REGISTER :							
Diagnosis not confirmed ..	2	1	3	..	..	..	3
Re-diagnosed N.R. to R. ..	..	..	..	..	..	..	..
Recovered	134	148	282	21	17	38	320
Transferred-out	30	22	52	..	3	3	55
Lost sight of	15	8	23	2	..	2	25
Deaths from tuberculosis ..	28	9	37	1	..	1	38
Deaths from other causes ..	40	7	47	..	1	1	48
Register Revision .. .. .	..	..	..	..	..	..	..
Totals	249	195	444	24	21	45	489
Cases on register at 31.12.58 plus cases added in 1959 ..	1,993	1,429	3,422	242	266	508	3,930
Minus cases taken off 1959 ..	249	195	444	24	21	45	489
Plus N.R. to R. .. .. .	..	..	..	..	..	..	..
CASES ON REGISTER AT 31.12.59	1,744	1,234	2,978	218	245	463	3,441

(Table 1)

	Nos. of Leeds Resi- dents	Rate per 1,000 popn.	Variation on previous year	"Trans- fers in"	Total	Rate per 1,000 popn.
No. of persons on Clinic Register	3,400	6.62	—58	41	3,441	6.70
New notifications :						
All forms of tuberculosis ..	378	0.74	+37	41	419	0.82
Respiratory tuberculosis ..	341	0.66	+20	39	380	0.74
Non-respiratory tuberculosis	37	0.07	+17	2	39	0.08
Deaths :						
All forms of tuberculosis ..	50	0.10	—6	..	..	0.10
Respiratory tuberculosis ..	45	0.09	—9	..	..	0.09
Non-respiratory tuberculosis	5	0.01	+3	..	..	0.01

(Table 2)

Type of Tuberculosis	1956	1957	1958	1959
Respiratory (Total)	413	334	321	341
Primary pulmonary tuberculosis ..	28	34	19	26
Primary pul. tub. as % of total ..	6.8	10.2	5.9	7.6

(Table 3)

Primary Tuberculosis.—The incidence of primary tuberculous disease appears to remain static when assessed as the percentage of the total of notified pulmonary tuberculosis patients (see Table 3).

Mortality of Tuberculosis.—Of the total of 50 deaths in 1959, 22 (44 per cent.) cases were not known until time of death, whilst a further 7 (14 per cent.) died during the year of notification (see Table 4). Although pulmonary tuberculosis as a thoracic cause of death continues to decline, all other major thoracic causes of death showed an increase in 1959 over the previous four-year figures (see Table 5), whilst deaths from accidents remain practically constant.

Case-Finding Methods.—The relative value of the usual case-finding methods is shown in Table 6. Although there are slight variations from year to year, the overwhelming importance of cases referred by general practitioners is clearly indicated. Second to this in importance is the Exclusion X-ray Service, which is analysed in Table 7.

However, the efficiency of the Mass X-ray Unit as a method of tuberculosis case-finding continues to decline slowly and these figures are reflected from the general trend seen in the country as a whole.

PRINCIPAL THORACIC CAUSES OF DEATH

	1955	1957	1959	
			All deaths	Men 45+
Pulmonary tuberculosis ..	67	47	45	34
Cancer of lung	270	239	290	230
Bronchitis	463	423	500	345
Coronary artery disease ..	933	946	1,156	676
Pneumonia	255	270	463	171
Totals	1,988	1,925	2,454	1,456
All accidents (for comparison)	163	160	155	39

(Table 5)

Method	No. of new patients so investigated	No. of new cases of pulmonary tuberculosis found	Ratio per 1,000 examinations		
			1959	1958	1957
G.P. Letters	1,641	70	43	47	45
Exclusion X-ray Service	5,282	67	13	9	13
Routine X-Ray for other purposes	376	2	5	14	28
Contact examinations ..	3,825	23	6	3	8
M.M.R.	27,781	28	1.0	1.1	1.1
Total	38,905	190	4.9	4.0	5.5

(Table 6)

EXCLUSION X-RAY SERVICE DISCOVERY RATE

	1959	1957	1955
Total attendances ..	5,282	5,264	3,523
New cases of pulmonary tuberculosis	67	66	70
Ratio per 1,000 examinations	13	13	20

(Table 7)

Age-Groups	Nos. examined		Nos. with presumed inactive pulmonary tub.		Nos. with presumed active pulmonary tub.	
	M.	F.	M.	F.	M.	F.
0-14.. .. .	↓	↓	..	..	..	..
15-24.. .. .			2	1	7	14
25-34.. .. .			5	3	4	1
35-44.. .. .			8	3	6	3
45-59.. .. .			14	6	8	4
60+	↓	↓	2	1	2	..
Total by sexes	14,062	13,719	31	14	27	22
Grand total	27,781		45		49	

(Table 8)

	1958	1959
1. Nos. of contacts examined :	3,525	3,825
(a) No. of new contacts seen	1,483	1,782
(b) No. of old contacts seen	2,042	2,043
2. Nos. of tuberculin positive contacts :	3,237	3,597
(a) followed-up in Chest Clinic	2,632	2,939
(b) followed-up by M.M.R. Unit	605	658
3. Nos. of tuberculin negative contacts :	893	886
(a) No. given B.C.G. vaccination	861	876
(b) No. refused B.C.G. vaccination	32	10
4. Nos. of cases of pulmonary tuberculosis discovered :	11	10
(a) among new contacts seen for first time	11	10
(b) among old contacts under review .. ..	..	..
5. Ratio per 1,000 of new cases of pulmonary tuberculosis discovered :	3	2.6
(a) among new contacts	7	5.6
(b) among total contacts under review..	3	2.6

(Table 9)

TUBERCULIN SENSITIVITY OF MEMBERS OF THE UNIVERSITY OF LEEDS (With acknowledgments to Dr. R. J. Still).

	1959			1958 Total	1957 Total
	Males	Females	Total		
No. tested	815	270	1,085	1,255	1,013
No. completed testing	686	219	905	1,050	778
No. of tuberculin positive	385	97	482	563	426
No. of tuberculin negative	301	132	433	487	352
No. vaccinated with B.C.G.	297	117	414	463	317

(Table 10)

TUBERCULOSIS—SOCIAL WORK

BY

BARBARA M. R. NORTHROP, M.A.

Senior Tuberculosis Almoner

Help given by the Health Committee.—The provisions made available by the Special Services Committee have been utilised whenever necessary for the benefit of Leeds patients.

A pint of milk per day free of charge was supplied to 180 patients in the course of the year. Only two patients needed bedsteads and mattresses complete with bedding to enable them to sleep separately and avoid spreading infection; a bedstead and mattress were loaned to another infectious patient who was able to supply his own bedding. Further loans of second-hand bedsteads and mattresses were made to two non-tuberculous patients in the terminal stages of their illness so that they could be nursed downstairs, and to the enuretic children of two more patients. 24 patients whose bedding wore out or was inadequate were provided with replacements and additions to their stock. Clothing was supplied to 284 patients and their families.

Medical requisites were loaned to one patient. As the number of patients requiring medical loans from the Clinic diminished considerably, it was arranged at the beginning of the year that the stock of nursing requisites which had been kept at the Chest Clinic should be returned to the main store at Market Buildings; patients now apply there direct for medical loans.

In all, 1,962 patients and their relatives were interviewed at the Clinic by the Almoners in the course of the year and 763 applications for help were made to the Special Services Committee.

Co-operation with other Departments.—The Almoner's Department has maintained the usual helpful contacts with statutory departments inside and outside the Corporation.

During the year 53 patients were recommended for convalescence, 44 of these, of whom 28 were non-tuberculous, were referred to the Convalescence Section. Convalescence at Shoreston Hall was arranged for three tuberculous patients who were not considered suitable for an ordinary Home. Two patients living

outside Leeds were referred to the appropriate Divisional Medical Office of the West Riding County Council ; two patients who wished to take advantage of their contributing to the Leeds Workpeople's Hospital Fund were referred there for a convalescent holiday.

Requests for home help were made on behalf of 17 patients, three of whom were non-tuberculous. The majority of patients referred for home help this year were elderly people living alone or elderly couples.

The Care of Children Department were contacted on 5 occasions when arrangements had to be made for children temporarily deprived of their mothers ; in 4 cases the mother was being admitted to hospital or sanatorium for treatment.

The Chief Education Officer was asked to help with clothing for the children of two patients who could not easily provide it. The West Riding Education Department was approached on one occasion in order that a clothing grant could be expedited for the son of a woman patient who was out of work and unable to meet the needs of a rapidly growing boy.

At the other end of the scale from the children come the elderly, whose needs were reported to the Welfare Services Department whenever necessary. Two ageing patients who seemed no longer able to live alone were recommended for hostel accommodation ; two more, who are still carrying on at home, are to be visited regularly. The problem of an elderly relative whose presence was burdensome to the family with whom she had gone to live was also referred to the Welfare Services Department. An application was made for one much younger patient to be considered for membership of a Handicapped Persons Club, to fill in the time until he could start work. Grants of furniture to three patients being rehoused in Corporation property were provided.

The Blind Welfare Department enabled one woman patient to go into sanatorium by arranging accommodation for her blind mother. Another request was made to this Department for help in persuading one of their patients to accept home help so that the married daughter, a patient of the Clinic, should not have to look after her parents' home as well as her own. Home help had been provided but was cancelled by the parents who did not appreciate that the extra strain was affecting their daughter's health.

Summer brought the usual problems of gardens to be kept in order by patients unable to do heavy work ; the Housing Department was asked on two occasions whether help could be given with digging and hedge cutting.

One patient was referred to the Mental Health Department, not on his own account, but because a relative living in the same house who was considered to be mentally ill.

As always, there was a constant two-way traffic between the Almoner's Department and the Ministry of Labour in the attempt to find suitable work for patients of all ages and stages of disease and with varying abilities and skills. In all, 130 patients were referred to the Disablement Resettlement Officers during the year, October providing a record number of 20. This was due to 5 patients being submitted for the Remploy Special Factory which had vacancies for new workers. 27 patients were recommended for a course at the Industrial Rehabilitation Unit ; 3, already in work, were referred simply for registration as disabled and 3 others who were working were advised to find more suitable employment.

The Ministry of Pensions and National Insurance was approached on behalf of three patients with special problems. One patient's insurance benefit had been reduced below the level of the scale for tuberculous patients and another was in difficulties because his National Health Insurance benefit was being paid fortnightly instead of weekly. A patient who had only just arrived in Leeds was in receipt of a resettlement grant from the Ministry of National Insurance and a request was made for help out of this grant to enable the patient to clothe himself.

Close and regular contact has, as usual, been maintained with the National Assistance Board. 162 patients and their relatives were referred for allowances during the year. 62 were new patients and 16 were patients who had not needed to be referred when they were new to the Clinic but whose circumstances changed later. 15 were patients who relapsed after a period at work and 41 were discharges from sanatoria. 13 patients were referred for the ordinary scale of allowance, 12 because they were non-tuberculous and did not qualify for the higher scale, and one who was not eligible because he was a recovered case. 13 patients were recommended for a grant for extra nourishment. These were all patients

who did not qualify for the higher scale of allowance, either because they were not tuberculous, or, if they were tuberculous, because they had not given up work to take treatment or were not pulmonary cases and therefore did not satisfy the conditions. 10 patients in sanatorium were referred, one for pocket money because he had no other source of income and 9 for allowances to support their families at home. 31 patients needed financial help for a variety of other reasons. The majority were men who were back at work but became unemployed temporarily, or married women whose husbands were in the same position. Need also arose when patients starting work had to wait a fortnight for their first wage and when patients' wives, working to support their families, had to cease work.

During the year 26 patients were recommended for grants in kind. The majority of these were for beds and bedding but grants were also made to provide patients with fireguards, where there were young children in the house and also home help, fares and the first week's rent in new homes.

We sincerely thank all statutory departments for their kindness and help during the year.

Voluntary Organisations.—The Leeds Association for the Care of Consumptives continued its invaluable work for the patients of the Chest Clinic throughout the year. 224 grants were made. As usual, the majority were for groceries to raise patients' standard of nourishment over a period and this year a welcome innovation was the provision of a coal order to ensure that a patient living alone had sufficient fuel every week to keep a fire going. Four loads of coal were also supplied to patients who had none and 13 bills for light and heat paid in other cases. Pocket money was supplied for patients in hospital and fares paid to enable relatives to visit outlying sanatoria. Furniture and curtaining were supplied to a number of patients who had been rehoused and the cost of a removal was met. The fee for convalescence was paid for 16 patients and the cost of a holiday for an elderly couple. A wide variety of miscellaneous grants included the repair of a vacuum cleaner, the cost of a medical examination for an intending emigrant to Australia, the purchase of a wireless licence and the redeeming of a suit from pawn.

The Morley After-Care Committee was approached twice during the year on behalf of patients in their area, whom they helped with grants for bedding and extra nourishment.

Last year only four applications were made to the National Society for Cancer Relief for help for patients suffering from a carcinoma. This year 12 such patients were found to be in need and grants were made in every case. The help given by the National Society for Cancer Relief has eased the last days of 7 patients who died during the year and relieved their wives of the anxiety caused by shortage of money at a time of stress.

The Women's Voluntary Service helped 20 patients with grants of second-hand clothing and 11 other patients received grants as follows :—

Royal Air Force Benevolent Fund	Clothing, electricity bill
Royal Air Force Association ..	Financial help to patient in business
Royal Artillery Benevolent Fund	Hire purchase
R.E.M.E. Benevolent Fund	Arrears of rates
Royal Naval Benevolent Trust	Clothing
The Friends of the Poor ..	Cost of forwarding luggage ; debts
The Glasspool Trust	Debts ; bedding
The Personal Service League	Clothing

The small number of applications made in 1959 to Service funds and other charitable organisations is largely due to the continued help of the Leeds District Aid in Sickness Fund, which enables non-tuberculous patients in particular to be helped quickly and effectively when need arises. During the year 63 applications were made to the Fund and grants were received for debts, clothing, bedding, furnishings, convalescence, pocket money, a wireless licence, a removal, repairs to property and a lodging allowance.

A woman patient's life was disturbed at regular intervals by marital disharmony, due to the heavy drinking of her husband who was otherwise a good worker and devoted to his family. He was put in touch with Alcoholics Anonymous, in the hope that he might be helped to overcome his failing.

Without the support and help of voluntary organisations it would be impossible for the Almoners to lift the burdens of worry which weigh so heavily on many patients. We offer most grateful thanks to all the Committees which have responded so generously to appeals during 1959.

Non-Tuberculous Patients.—Work for non-tuberculous patients has continued side-by-side with that for tuberculous patients. Financial assistance has been obtained for them whenever necessary and help and advice given in their problems and difficulties.

Work in Sanatoria.—The Senior Almoner's visits to Scotton Banks Hospital ceased when tuberculous women patients from Leeds were no longer sent there but up to June, 1959, 7 visits were made. 15 visits were made to Middleton Hospital. The Hospital Management Committee was asked to provide clothing for three patients who could not afford to supply their own.

General.—The Senior Almoner gave the annual lectures to health visitor students, district nurses and to a group of student nurses working for the examination of the British Tuberculosis Association. She also spoke on the work of the department to two church groups and a Townswomen's Guild. These talks often lead to offers of help to patients from members of the audience ; this year one of the church groups gave its collection to be used for the benefit of patients and the other gave the toys from the Christmas Toy Service of the Sunday School, gifts which were both very much appreciated.

The Almoners were invited to the Annual General Meetings of St. Faith's Moral Welfare Association, the Leeds Council of Social Service and the Marriage Guidance Council. They were also present at a meeting of social workers to hear an account of social work trends in the United States of America.

When Christmas came, the Leeds Association for the Care of Consumptives made a generous grant of a bag of coal to each of 100 aged and infirm patients ; the Leeds District Aid in Sickness Fund provided food parcels for another 22 patients. Private donations and gifts enabled 6 other patients to receive a Christmas present. We were able to distribute toys and books to 240 children from 81 families, thanks to gifts from the Leeds Workpeople's Hospital Fund, " Yorkshire Post " and Harehills Lane Methodist Sunday School. We shared in the pleasure of children and parents alike at the kind thoughts of so many of their more fortunate fellow citizens for the patients of the Chest Clinic and join our grateful thanks to theirs.

Disinfestation and Disinfection

DISINFESTATION AND DISINFECTION

BY

C. W. LAMB, M.R.S.H., F.R.E.S.,

Disinfestation Officer

The Disinfestation and Disinfection Section of the Department is situated at Stanley Road, Harehills.

The Centre is made up by a number of buildings : an administration block, a building housing high pressure and low pressure disinfection plant with laboratory and offices in one unit, a clinic building for the treatment of pediculosis and scabies conditions, with facilities for the cleansing of geriatric cases and containing a lecture room for educational purposes ; a large hydrogen cyanide plant, an insecticide store with mixing plant, a modern boilerhouse in course of construction for the production of steam for sterilisation and heating purposes, and garage accommodation for the twenty vehicles serving the Centre.

The Disinfestation Officer has four Assistant Officers each responsible for his sub-section :—(a) General Disinfestation, (b) General Disinfection, (c) Maintenance and Cleansing of Public Conveniences and (d) Drainage and Public Sewer Flushing.

Personal Disinfestation.—This Section, housed in the Clinic block, is supervised by a State Registered Nurse who is assisted by one male and two female attendants. The Clinic building has at one end of it a section for the treatment of *pediculus capitis*. During 1959 1,779 persons were given 1,785 treatments, 1,656 being children of school age and below. In connection with these cases 1,262 homes were visited, advice given and arrangements made for treatment by the two visitors, both of whom are qualified nurses. Close collaboration was maintained with the School Health Service.

The other end of the Clinic building is designed for the treatment of *pediculus corporis*, *phthirus pubis* and scabies cases. Cases of *pediculus corporis* numbered 360 and by far the greater proportion

of these were vagrants. A number of persons coming within the definition of the National Assistance Act, 1948, Section 47, in need of care and attention and usually in a dirty and verminous condition were cleansed and disinfested before their admission to a Welfare Home or to a hospital. In this instance, close collaboration with the Welfare Services Department enabled the scheme to run smoothly.

During the year 563 persons were treated for scabies, of which number 214 were of school age and under. 290 contacts received prophylactic treatment and a total of 438 homes were visited. These cases are referred for treatment by the Skin Department of the Leeds General Infirmary and by general medical practitioners. There were only 12 cases of *phthirus pubis*.

General Disinfestation.—This Sub-Section is supervised by an assistant officer and has six house disinfestation operators and one hydrogen cyanide operator.

When, in 1934, slum clearance and the consequent removal of slum dwellers to the newly constructed Corporation housing estates brought this city into the limelight in relation to hydrogen cyanide fumigation, the bed-bug infestations encountered were severe and extensive and the costs of disinfestation high. To-day, although the incidence of bug infested houses, prior to vacation, is still high, the infestations are extremely light and the use of hydrogen cyanide fumigation is no longer necessary in this connection. In collaboration with the Housing Department, 1,344 dwellings were subjected to spray treatment, using a synthetic insecticide in solvent form. Half of this number, i.e. 672 dwellings, were bug infested slum properties with their contents and the other half Corporation houses sprayed prophylactically to receive the slum dweller. This scheme worked exceptionally well. It speeded up the transfer of tenants from the verminous slum houses to the Corporation houses thus considerably reducing the time the latter stood empty, avoiding loss of rent to the Housing Department. This speeding up was only possible with the co-operation of the Resident Housing Managers of the widely separated estates in the city and the direct contact made with the in-going tenants. All of these were visited, the houses inspected and where found verminous arrangements were made for disinfestation before removal. In this connection alone, 1,158 visits were made.

Re-infestation of Corporation houses sprayed during the year to receive verminous tenants does not occur within that period, but 37 Corporation houses not so sprayed during the previous twelve months became infested or re-infested by bed bug, mainly because of the introduction into the house of some second-hand article of furniture or bedding which had been purchased in a verminous condition privately or from some second-hand dealer.

The problem of bed-bug infestation and disinfestation in rehousing is practically non-existent ; as already stated, such infestations are light and therefore easily eradicated. Instead, woodworm infestations are considered to be of equal importance. Such infestations are not a matter of public health but they are tremendously important as far as the economics of housing management are concerned. An infestation introduced can soon become widespread with little evidence of its presence in its early stages, and control, with possible success of eradication, is difficult and lengthy in its application. It is, therefore, now policy when investigating verminous conditions in slum houses, prior to the transfer of the tenant to the Corporation house, to pay equal attention to the possible presence of woodworm in the structure or, more important, in the furniture of the slum house. Where woodworm is found in the furniture of such tenants, a hydrogen cyanide fumigation process is insisted upon and carried out at the time of the removal of the tenant to the Corporation house.

Because of this problem of woodworm disinfestation, the hydrogen cyanide plant, originally created for bed-bug eradication, is retained though reduced to half of its former capacity. Should a woodworm infestation be found on inspection of the slum house and its contents, the latter are removed by means of a container gas van to the Disinfestation Centre. At the Centre the furniture is subjected to hydrogen cyanide fumigation and then delivered to the Corporation house some two days later. Subsequent inspections have proved that the woodworm condition has been eradicated and the danger of an extension to the structural timber of the Corporation house removed. During the year 662 articles of furniture were fumigated by hydrogen cyanide and 21 removals were carried out in this connection.

Apart from this specialised work of disinfestation in relation to the rehousing process, insect pest control of Corporation dwellings has been maintained. Working in close collaboration with the Clerks

of Works of the Housing and Works Departments and the Resident Housing Managers of the various estates, infestations by woodworm, cockroaches, steam-fly, red spider, golden spider beetle, etc., have been controlled and in most instances wiped out completely. Requests for woodworm disinfection have continued to increase steadily and the first signs of a commencing infestation are usually reported promptly. The latter occur usually on estates which are bounded by woods and plantations. Dead timber in a plantation soon becomes infested and a favourable wind could very easily send an emerging swarm to the adjoining estate of houses, where they enter by open windows, air-grates or by way of the eaves to the roof space. 94 treatments for woodworm were carried out in Corporation houses. Such treatments were arranged to coincide with works of maintenance: infested timbers were replaced by treated timbers and easy access to sub-floor and roof spaces was prepared for subsequent spray treatments which are arranged to cover a period of 3 years, two applications per year, one in March/April and the second in July/August.

The golden spider beetle (*nipatus hololeucus*) which received a certain amount of publicity in the previous year, was found to infest 58 requisitioned Corporation houses, all of which were being converted into flats. Infestations having been discovered as soon as works of conversion had commenced, disinfection was made much easier in its application and by the time the flats were ready for occupation, the infestation had more or less been eradicated.

The red spider or clover mite continues to prove a nuisance especially in the more recently erected Corporation houses. Such infestation is an infestation of the site rather than that of the house, but the protection from the weather and the warmth on the south side that it offers, attracts the mite. Control measures are successful but not immediate.

The window fly (*anisopus fenestralis*) sets a problem in the early part of each year. It is quite content to stay and complete its life-cycle on the filter beds of the sewage works but it readily becomes wind-borne and is then carried in the wind direction as far as two miles from its normal habitat. Numerous control measures have been tried and experiments continue in the hope that the nuisance can be effectively controlled very soon.

In addition to the regular disinfection programme carried out for the Housing Department, other Corporation Departments have taken advantage of the facilities offered by the Disinfestation Section. Woodworm control of properties owned by the Waterworks Department in the Washburn Valley has continued. The death-watch beetle is still slightly active at Swinsty Hall ; several beetles continue to emerge each year, but with the presence of the prepared toxic insecticidal film on the roof timbers from which they emerge, the beetles are found in either early or late stages of paralysis after emergence and die. There is no apparent evidence of extension of the infestation and as soon as the extensive life-cycle of the beetle is completed, the infestation should come to an end.

Outbreaks of woodworm in school furniture and in the structure of some of the schools, both old and new, continue to occur and are dealt with on instructions from the Education Committee. *Lyctus brunneus* (powder post beetle) has been found in recently laid floors of the new schools but the prompt application of insecticide after removal of the polished surfaces put an end to the infestation, the life-cycle of which rarely exceeds twelve months.

As already mentioned close collaboration with the Welfare Services Department in connection with geriatric cases has been maintained. In addition to the treatment of the aged persons in the Clinic, their homes have to be disinfested. It is usual to empty their contents into gas container vans and, after hydrogen cyanide fumigation, send them on instructions of the Welfare Services Officer to the saleroom for disposal by auction. The verminous dwelling having been cleared is then given a spray treatment before the keys are returned to the owner or his agent.

Both Leeds Hospital Groups and the United Leeds Hospitals continue to entrust their disinfection programme to the Disinfestation Section. Cockroach, steam-fly and ant control is carried out at regular intervals and outbreaks of fly infestations, especially at St. James's Hospital have been investigated. The latter are usually traced to a nearby tip and with the co-operation of the Cleansing Department, steps are taken to prevent further outbreaks by increasing the efficiency of controlled tipping and the application of powder insecticides to the surface of the tip. The disinfection facilities of the city have also been extended, when applied for, to

private firms, property owners and the general public. These works include the disinfestation of verminous bedding, woodworm infested furniture and structures, bug infested dwellings, cockroach and steam-fly infested hotel and restaurant kitchens and control of and precaution against infestations by clothes moths.

Assistance in this field of disinfestation has also been offered to and been accepted by neighbouring local authorities. The types of infestations referred to are usually those which require specific treatment and apparatus, but also include bed bug and cockroach disinfestations. One outside authority, Ilkley U.D.C., continues to use the hydrogen cyanide removal process in connection with woodworm infested slum dwellings at Burley-in-Wharfedale. The relative short distance of 14 miles from the Stanley Road Centre enables the proposition to be economic and offers a sound measure against the spread of infestation into new properties.

Methods of disinfestation vary according to the type and degree of infestation. DDT in kerosene with pyrethrum added remains effective in the field of bed bug infestation. Benzene hexachloride (BHC) in odourless distillate is prepared at Stanley Road thereby cutting its cost by almost 50 per cent. It is used in connection with pharoah's ants, steam-fly and other infestations in places where food is prepared or stored and where the absence of smell of the insecticide is of the greatest importance. BHC continues to be very effective against woodworm by its application twice yearly over a period of three years and hydrogen cyanide is an excellent ally in this campaign and in that against moth infested textiles. Xylamon, a German product, has been found excellent in use when dealing with dry rot infestations and with woodworm outbreaks in roof spaces or where the timber is in its rough state. Apart from these, several powders including DDT, BHC and Malathion have their specific uses.

Low pressure steam is used for the disinfestation of clothing, bedding and textiles generally, and the Thresh Low Pressure Current Steam Disinfestors answer to this purpose admirably. The programme for this type of infestation was quite heavy: in connection with the rehousing programme 11,135 articles were disinfested, in connection with occupied Corporation properties 625 articles and for work carried out for other purposes 4,112 articles.

No claim for compensation in relation to damaged articles was received during the year, which confirms the efficiency of the machine and pays tribute to the steam operators who handle them.

Insect pest control is essentially a public health service. Most insects either transmit disease or interfere with the personal comfort of the individual ; the house fly is known to transmit such diseases as dysentery, typhoid fever, summer diarrhoea and possibly many others. Cockroaches and steam-fly contaminate foodstuffs and make them unfit for human consumption, and bed bugs, lice and scabies cause sleeplessness, give rise to skin infections and generally lower the resistance of the human being.

General Disinfection.—This sub-section is supervised by an assistant officer in whose charge are four steam operators who manipulate one High Pressure Steam Disinfector and two Low Pressure Current Steam Disinfectors. Part-time assistance in this Section is obtained from the male nurse of the Clinic Staff, who will, when the Plant is put into operation, supervise the Package Boiler in course of erection. There are also two bedding van personnel, one a driver, the other the attendant, and a general stores vehicle similarly with driver and attendant, who are engaged on departmental transport, including the delivery of stores, etc., to the Maternity and Child Welfare Centres and Babies' Welfare Clinics.

Disinfection carried out during the year has been mainly in connection with cases of tuberculosis, either where a patient has gone to a sanatorium or where he and his family have been rehoused, or a death from the disease has occurred. Other disinfections concerned outbreaks of dysentery, and acute anterior poliomyelitis. In connection with the former, several schools required special attention. School toilets were visited twice daily and their appliances thoroughly disinfected until the outbreaks subsided.

Medical Loan Requisites were distributed in collaboration with the Chest Clinic and disinfected after collection and before redistribution. The articles loaned included blankets, sheets, pillow-cases, bedsteads and mattresses. 120 homes were visited, 388 articles delivered involving 831 miles transport.

In connection with infectious diseases, 355 houses were visited, 343 rooms were disinfected by formaldehyde, 917 beds and 19,016 articles were disinfected by steam. For outside authorities, 2 houses were visited, 9 beds and 28 articles disinfected. Packing straw, 655 bales in number, was disinfected by formaldehyde for export purposes as specified by the Board of Trade and the Import Regulations of the countries of destination. This also applied, to a lesser extent, to the sterilisation of bristles.

Steam disinfection is confined to one high pressure steam disinfector and is used for bacteriological disinfection of articles which can tolerate the high temperature and pressure. The steam for this purpose is obtained from the adjoining Cleansing Department's Destructor Boiler, but as the latter is about to be discontinued, a boilerhouse with package boiler, to be oil fired, is in course of construction in replacement. It is hoped to have the boiler plant in operation by the beginning of 1960.

For all other purposes, formaldehyde disinfection is used. It is generated by atomising, to 4 micron size aerosols, a 30 per cent. strength of formalin from a special aerosol machine. The formalin behaves as a vapour with considerable powers of penetration and the process is eminently suitable for space and surface disinfection. Used in an airtight chamber with a favourable relative humidity of not less than 60 per cent. complete disinfection of articles, not suitable for steam disinfection, is achieved after six hours exposure. A persistent *staphylococcus aureus* infection in one of the wards of the Leeds General Infirmary, which had defied other internal methods of disinfection, was completely eradicated by this aerosol process. Still very much in its infancy, rapid strides have been made in its application in Switzerland, and two of these machines, designed and manufactured in that country, are now in use at this Centre. Where formalin has been found to be too severe, bearing in mind that the formaldehyde acts as a powerful lachrymator, propylene glycol has been substituted for air disinfection. There are no irritating effects from this disinfectant and the room so treated can be used soon afterwards.

Chlorinated phenols, such as Dettol, Ibcot, etc., and white and black disinfectant fluids, the latter to British Standards 2462 : 1954, complete a formidable array of disinfectants used at the Centre.

Transport.—The distribution of food supplements and stores to Infant Welfare Centres and Day Nurseries was continued during the year. One stores van was maintained for these purposes and completed 8,295 miles.

Under the Medical Requisites Loan Scheme, the Section undertook the collection and delivery of invalid chairs, spinal carriages, mattresses, etc., which are stored at the Centre. During the year, 507 visits involving a total of 2,868 miles were made and each chair and carriage was thoroughly cleansed, disinfected, inspected and repaired, where necessary, before distribution.

In October commenced an experimental period of four weeks in the organisation of an Incontinent Laundry Service. Four patients suffering from incontinence were visited daily, four clean draw sheets delivered, the previous day's dirty linen collected and taken to St. George's Hospital Laundry, where with the kind co-operation of Group B Hospital Management Committee, arrangements had been made to receive. The sheets were provided by the Health Committee. The pilot scheme proved successful and in December the service restarted with eight addresses and, by arrangement with the Welfare Services Committee, the laundering was carried out at the South Lodge laundry. At the present moment no more patients can be accommodated owing to the limitations of the existing transport facilities and limited stocks of sheets, but it is hoped that, with these latter problems overcome, it will be possible to service about 40 patients daily in 1960.

With the adaptation of the HCN garage, providing a floor of approximately 120 sq. yds. area, departmental storage difficulties have been overcome and offers accommodation for surplus furniture, from discontinued Day Nurseries, Nurses' Homes, etc., available for re-use, if and when the occasion demands.

Public Conveniences.—This Sub-Section is supervised by an assistant officer and there are three squads, each consisting of two men with a motor vehicle carrying suitable flushing and cleansing appliances.

These squads are responsible for the general maintenance and cleanliness of the city's conveniences. There are altogether 74 unattended conveniences for males and females situated in 54

locations throughout the city ; 30 of these locations are within a mile and a half radius from the city centre, 13 are between one and a half and two miles and eleven are over two miles from the city centre. The locations of the unattended conveniences comprise 33 for males only, one for females only and 20 for males and females. There are 53 conveniences for males and 21 for females.

Attended conveniences number 5 in the centre of the city, three for males and females, one for males only and one for females only. There is also a convenience for both sexes at Crossgates which is attended for certain hours of the day only.

Cleanliness of the unattended public conveniences is controlled by daily visits made by the three squads. During the year a total of 22,182 visits were paid to the conveniences, both male and female. About 75 per cent. are cleansed each week-day, and, in addition, those situated in the centre of the city are cleansed on Sundays.

Maintenance work at unattended public conveniences is facilitated by these daily visits of the Flushing Squads, who report defects and structural damage to the supervising Officer-in-Charge. These reports are checked and the necessary repair work is ordered from the Works Department, a scheme which avoids unnecessary delay in getting repair work executed, an important factor in the satisfactory maintenance of public conveniences. The five attended public conveniences are visited by the Supervising Officer regularly and the same procedure adopted.

Six conveniences had improvements carried out upon them at a cost of £1,400 ; new stalls replaced badly worn and offensive ones and electric lighting was substituted for gas. Eight unattended public conveniences were provided with small wash-hand basins with a spring valve to the cold water tap, and it is planned to increase this number considerably during 1960.

The cost of repair work in attended public conveniences caused by fair wear and tear decreased to £57 15s. 2d. (£178 17s. 3d. in 1958) and wilful damage cost £15 10s. 8d. (£24 0s. 10d. in 1958).

In unattended public conveniences the cost of repair work by fair wear and tear amounted to £77 2s. 11d. (£112 9s. 8d. in 1958), the cost of wilful damage decreased to £44 17s. 8d. (£231 19s. 8d. in 1958), whilst frost damage accounted for £27 8s. 1d. It is pleasing

to note the improvement in the behaviour of some sections of the general public, especially youths, in relation to the unattended public conveniences, reflected by the decrease in costs of works of maintenance attributed to hooliganism. There is still room for improvement however.

The fitting of lock boxes of the penny-in-the-slot type has proved to be an excellent deterrent against wilful damage, and it is the policy to extend this precaution especially in those areas where in the past damage has been particularly heavy. Unfortunately, whereas lock boxes act as a deterrent to children, they are often the target for the criminal adult and, in a number of instances, lock boxes have been forced open or have been entirely torn from their doors and stolen. This occurs in spite of the fact that the boxes are emptied daily and therefore contain a few coppers only.

The maintenance of automatic electrical switchgear and emergency repairs are brought about by a special squad of two men, equipped with a motor vehicle, both of whom have been trained for this type of work by the City Lighting Department. Inspections are carried out daily, and this service prevents accidents when lighting fails, especially important when a public convenience is below ground level and can only be reached by a flight of steps. Thus during 17,732 visits paid, 371 lighting repairs were effected.

Public Sewer Flushing.—This Sub-Section is supervised by an assistant officer who has at his disposal two squads of drainage flushers, equipped with motor vehicles and necessary appliances such as flushing drain rods, drain plugs, smoke machine and a Mono Sludge Pump mounted on a trailer. These squads work under the direction of public health inspectors in connection with (i) the cleansing of public sewers under the Public Health Act, 1936, Section 23, (ii) the testing of drains in the investigation of unsatisfactory drainage conditions of a building as required under the Public Health Act, 1936, Section 39, (iii) the removal of stoppages from drains and (iv) the pumping out of flooded cellars, inspection chambers, etc.

The facilities of this service were extended to other Corporation Departments, especially to the Housing Department, the City Engineer's Department, the Markets Committee, the Parks and Cemeteries Department, to private contractors and property owners.

Contract work for the regular cleansing of drainage systems of private schools, including the Leeds Girls' High School, several banks and some of the larger firms has been undertaken. Whereas the cost of cleansing of public sewers is a charge upon the Health Committee, the cost of all other works of cleansing, investigation and pumping has been recovered from the ordering bodies.

The demand for this specialised work is continually increasing ; indeed there are some days when the time-tables of the squads are completely booked several days ahead. Because of its nature, some of the work can only be carried out on Sunday mornings or after business hours, therefore some overtime is unavoidable. During the year 868 public sewers were cleansed (865 in 1958) and the number of private drains tested and/or cleansed amounted to 32,929 (37,149 in 1958).

By the establishment of this service the Health and Housing Committees have effected a tremendous saving in the cost of public sewer cleansing and other drainage investigations ; more important still, there has also been tremendous saving in time, stoppages having been cleared in most instances the same day that they have been brought to the Section's notice.

DISINFESTATION CENTRE—REPORT OF WORK, 1959.

1. DISINFESTATION.

A. Work carried out at the request of the Housing Department :

(a) Rehousing :—

No. of visits of inspection	1,158
No. of dwellings disinfested by insecticide ..	1,365
No. of articles disinfested by steam	11,135
No. of articles disinfested by HCN	662

(b) General :—

No. of visits of inspection	127
No. of dwellings disinfested by insecticide ..	280
No. of articles disinfested by steam	625
No. of articles disinfested by HCN	—

B. Work carried out for other sources :

No. of visits of inspection	275
*No. of premises disinfested by insecticide ..	899
No. of articles disinfested by steam	4,112
No. of articles disinfested by HCN	867

* for other authorities 8 ; for Leeds 891

2. TREATMENT OF VERMINOUS PERSONS.

(a) Pediculus Corporis :—

No. of homes visited.. .. .	42
No. of persons treated	360

(b) Pediculus Capitis :—

No. of homes visited.. .. .	1,262
No. of persons treated	1,779
No. of treatments involved	1,785

(c) Scabies :—

No. of homes visited.. .. .	438
No. of persons treated	563
No. of contacts treated	290
No. of re-infections	71

3. DISINFECTION.

	City	Outside Authorities
No. of houses visited	355	2
No. of rooms disinfected	343	—
No. of beds disinfected	917	9
No. of articles disinfected	19,016	28
No. of school toilets disinfected ..	2,432	—
No. of bales of straw disinfected	655	—

(Continued)

DISINFESTATION CENTRE—REPORT OF WORK, 1959 *Continued.*

4. PUBLIC CONVENIENCES.

	No. of visits	No. of flushings :—	
		Drains	W.C.'s
Visits paid for cleansing purposes	22,182	33,844	25,605
	Total	Lighting	Repairs
Visits paid for inspection of lighting and emergency repairs	17,732	371	—

5. PUBLIC SEWERS.

No. of public sewers cleansed	868
No. of private drains tested and cleansed	32,929

6. TRANSPORT.

(a) Medical Loan Scheme :—

Visits made for collection and delivery of invalid chairs, spinal carriages, etc.	507
	(2,868 miles)

(b) Chest Clinic :—

No. of houses visited	120
No. of bedsteads, beds, etc., delivered	388
	(831 miles)

(c) Delivery Service :—

Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of stores..	8,295
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7. INCONTINENT LAUNDRY SERVICE.

No. of visits made	144
No. of miles run	720

National Health Service Act 1946

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Section 23 MIDWIFERY
Section 24 HEALTH VISITING
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Section 26 VACCINATION AND DIPHTHERIA IMMUNISATION
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SECTION 22

CARE OF MOTHERS AND YOUNG CHILDREN

BY

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Assistant Medical Officer of Health for Maternity and Child Welfare

Maternity and Child Welfare Centres.—There has again been a slight decrease in the number of expectant mothers attending the ante-natal clinics, and the number of children under 5 years attending the infant clinics has also decreased during 1959. More expectant mothers are receiving ante-natal care from their own doctors and this provides continuity of medical care throughout pregnancy and during the confinement, when the mother is confined at home. The decrease in the attendances of children at the clinics may be due partly to more preventive work being undertaken by the family doctor, but from July, 1959, the sale of all proprietary brands of dried milk and infant foods at the clinics was stopped, and this may also have been a factor in reducing the numbers.

The Leeds Health Authority continues to act as a central booking agency for maternity hospitals in the city and this encourages attendance at the ante-natal clinics; more general practitioners are also undertaking the ante-natal care of their patients who are booked for confinement in hospital.

Welfare Foods.—National Dried Milk for infants and vitamin preparations for expectant and nursing mothers and children under five years were still supplied at the clinics.

Educational Work.—Health education in the clinics by means of demonstration material and visual aids prepared by the health visitors has only been possible to a very limited extent owing to shortage of staff. Dental hygienists have continued to visit the clinics in rotation to advise mothers in the proper care of their own and their children's teeth. Through the co-operation of the Yorkshire Electricity Board, cookery demonstrations have been held at a number of clinics and these have been much appreciated by mothers attending the clinics.

Leeds Babies' Welcome Association.—Members have continued to give their regular and valuable help in the clinics as voluntary workers ; assisting with routine clerical work ; in some clinics undertaking the weighing of the children, and organising play corners for toddlers ; being responsible for the sale of knitting wool, baby clothes and fireguards and at all times helping to maintain a friendly atmosphere in the clinics. Members have also continued in their efforts for "Safety in the Home" and guarding against accidents, particularly burns and scalds of young children.

Ante-Natal Clinics.—By 31st December, 1959, there were 202 ante-natal sessions held per month at 25 clinics. The number of expectant mothers attending the clinics during the year was 8,982, a decrease of 293 ; of this total 6,134 were new cases. The total number of attendances at all clinics was 33,247, a decrease of 2,850. In addition to the ante-natal sessions at which the clinic doctor was in attendance, there were 108 sessions per month carried out by municipal midwives.

Post-Natal Clinics.—There have been 17 post-natal sessions per month held at 9 clinics. The number of mothers who attended was 845 with a total number of attendances of 979. The majority of mothers now attend the hospital or their private doctor for post-natal examination.

Infant Clinics.—There were 29 clinics in operation at the end of the year at which 243 sessions were held per month. The number of infants under one year attending the clinics for the first time was 5,940, a decrease of 75. During the year 4,042 children between one and two years attended, and 3,603 children between two and five years, a decrease of 81 and 137 respectively, making the total number of children attending 13,585 with 86,399 attendances made, a decrease of 293 in the total number of children and a decrease of 4,290 in the total attendances. The number of children on the register at all clinics on 31st December, 1958, was 15,048 ; with 6,643 new children registered, 6,685 names removed of children who were 5 years old, had defaulted, died or left the district, the number on 31st December, 1959, was 15,006, a decrease of 42 on the previous year.

Consultative Infant Clinics.—The arrangements with the University Department of Pædiatrics and Child Health continued, and three consultative infant clinics were held each month. The total number of attendances of children under five years was 164.

Physiotherapy.—The number of children referred during the year for examination by the Orthopædic Consultant was 282, an increase of 97 on the number referred in 1958.

Artificial Sunlight.—This was given to 332 children during the year and the total number of attendances at the six infant welfare centres was 4,681. These figures show a decrease of 19 in the number of children attending compared with those for 1958. This would seem to indicate that the number of children attending the infant clinics who required to be referred for sunlight therapy is still decreasing.

Remedial Exercises.—A total of 292 children attended for exercises with 2,981 attendances, a decrease of 53 in the number of children as compared with 1958.

Ante-Natal and Post-Natal Classes.—These exercise classes for expectant and nursing mothers were held at 10 and latterly at 6 welfare centres. The value of these classes and of the explanatory talks given by the physiotherapist is much appreciated by the mothers who attend. There were 113 mothers who attended ante-natal classes and 6 attended for post-natal exercises. The total number of attendances was 733 and 12 respectively. These numbers are considerably less than in 1958 as for six months no physiotherapist was available and for the latter part of the year only one part-time.

Eye Defects.—*Children classified as blind or partially blind.*—There were 4 children under five years and one partially sighted on the register at December, 1958. There was one child notified as blind during 1959; one child reached the age of 5 years and was removed from the register, leaving 4 children registered as blind and one as partially sighted on 31st December, 1959. Of these, one child is in a Sunshine Home and 4 in their own homes.

The arrangement has continued for any child under 5 years attending the infant welfare clinics who is found to have a squint or other eye defect, to be referred to the ophthalmic consultant at the school clinic, thus providing continuity of supervision and treatment for such cases.

During 1959 the number of children seen by the consultant for the first time was 114; in addition, 59 children re-attended for further consultation, making a total of 173 children examined. This is a decrease of 83 on the number seen in 1958 but for part of the year no consultant service was available.

Care of Premature Infants.—Between 1st January, 1959, and 31st December, 1959, there were 603 live births notified of infants weighing $5\frac{1}{2}$ lbs. or less at birth. Of these, 480 were born in hospital or nursing home in the city and 123 were born at home. The number of those born at home who were removed to hospital was 26 and the remaining 97 were nursed at home.

The number of infants who died within 24 hours of birth was 68 all of whom were born in hospital.

Of the 97 infants nursed at home, 51 received special nursing care by the premature baby nurses, with a total of 2,897 home visits.

As well as nursing those infants born at home, the special nurses undertook the after-care of 371 infants requiring further nursing care following discharge from the Leeds Maternity Hospital, St. James's and St. Mary's Hospitals. The total number of home visits to these cases was 5,249.

Provision for the Care of the Unmarried Mother and Her Child.—The arrangements have continued with the three homes in the city run by voluntary organisations to admit Leeds cases recommended by the Health Committee, and for which the Committee accept financial responsibility for a period of three to four months. Arrangement was also made for cases which cannot be admitted to these voluntary homes to be taken for a limited period into the Bradford Local Authority home. In exceptional circumstances Leeds cases may be admitted to other voluntary homes outside of Leeds.

During 1959 the following arrangements were made :—

Mother and Baby Home	No. of mothers admitted
Mount Cross Salvation Army Home, Leeds	24
St. Margaret's Roman Catholic Home, Leeds	13
Browning House, Church of England Home, Leeds	11
Bradford Local Authority Home ..	3
	—
Total	51
	==

Convalescence.—During 1959, 63 mothers and 65 children under five years were referred from the Maternity and Child Welfare Clinics and sent for a period of convalescence.

Day Nurseries.—There was still considerable demand for the admission of children to the day nurseries, and there was a small waiting list of children for admission to several nurseries. Priority was still given to children according to social or economic circumstances necessitating the mother going to work, or, in a small number of cases, where the mother was dead or had deserted the family. A few special cases were admitted on medical grounds. Except in the special cases mentioned above, no child attended a nursery unless the mother was in regular full-time employment.

The following table gives details of the accommodation and attendances at the day nurseries during the year :—

Nursery	No. of places	Daily Attendance per 5 day week	Total Number of Attendances
Quarry Hill	50	42·2	10,923
Blenheim Lodge	50	38·8	9,905
Harehills	50	40·5	10,577
Hunslet Hall	50	44·1	11,503
Armley	55	41·3	10,611
Low Road	55	21·3	5,397
Meanwood	55	37·4	9,761
Burley Park	75	41·7	10,678
Totals	440	307·3	79,355
% attendance		69·8 %	

Adoption Act, 1950.—The liaison between the Care of Children Department and the Health Department has been maintained. Notice is received of all children under five years placed with a view to adoption through the Children's Officer and the health visitor visits the child in the home of the prospective adopter each month. A report is sent to the Children's Officer on the care and progress of the child.

Medical examination of the children is carried out at the infant welfare clinics and blood tests are taken prior to the child being placed for adoption.

In this connection 60 mothers and 64 children had blood tests carried out at Central Clinic. The comparative figures for 1958 were 52 and 71 respectively.

Nurseries and Child Minders Act, 1948.—Under this Act applications were received during the year from 16 persons for registration as child minders, and one additional day nursery was registered.

The following table shows the number of registered daily minders, the number of registered nurseries and the permitted number of children minded :—

	Child Minders	Nurseries
No. on register at 31st December, 1958	20	10
Permitted No. of children at 31st December, 1958	120	314
No. registered during the year ..	14	1
No. of applications refused	2	2
No. of registrations cancelled	8	2
No. on register at 31st December, 1959 ..	26	9
Permitted No. of children at 31st December, 1959	152	289

REGISTERED NURSING HOMES.

	Maternity		Maternity and General			General		Total		
	No. of Homes	No. of Beds	No. of Homes	No. of Beds		No. of Homes	No. of Beds	No. of Homes	No. of Beds	
				Mat'y	Gen.				Mat'y	Gen.
Existing at 31st Dec., 1958 ..	3	62	1	2	32	7	79	11	64	111
Registration approved during 1959 .. ..	..	..	..	..	..	..	*2	..	..	2
Registration cancelled or surrendered during 1959 ..	..	..	1	2	32	2	5	3	2	37
Existing at 31st Dec., 1959 ..	3	62	..	..	..	5	76	8	62	76

* The Claremont Nursing Home — 2 additional general beds approved.

Nurses Act, 1943—Part II.—*Agencies for the supply of nurses.*—Under this Act only one nursing agency applied for registration in 1959 and a licence was issued.

Children Neglected or Ill-treated in their Homes—Since 1950 a Co-ordinating Committee, comprised of representatives of the Public Health, Education, Housing, Welfare Services, Probation, Police, Mental Health and Care of Children Departments, and inspectors of the N.S.P.C.C. has met regularly each month to consider significant cases of children neglected or ill-treated in their own homes. In each case the needs of the family as a whole are considered and agreement reached as to how local services, both statutory and voluntary, can best be applied to meet these needs.

During 1959, 31 new cases involving 113 children were considered and each case referred to the statutory or voluntary body best fitted to deal with the problems. In addition, 21 cases previously notified were re-considered.

The following table shows the number of cases notified and the notifying agencies :—

Notified by	Number of cases					
	1954	1955	1956	1957	1958	1959
Department :						
Probation	2	2	2	..	1	2
N.S.P.C.C.	10	4	3	3	2	5
Police	2	6	7	1	10	2
Health	6	..	6	21	10	12
Housing	2	2	2	2	1	2
Care of Children	11	1	10	2	4	1
Education	4	3	2	1	..	..
Welfare Services .. .. .	..	1	..	1	1	7
Miscellaneous	1	..	..	4	4	..
Totals	38	19	32	35	33	*31

* Plus 21 cases reconsidered

The following table shows some of the contributory factors affecting the cases considered and emphasises the complexity of the problems confronting the case workers :—

Case	Broken homes	Incomplete homes	Cohabiting	Low intelligence	Selfish and Indifferent	Shiftless and feckless	Household mis-management	Housing problems	Dirty homes	Abandoned	Ill-treatment	Unwanted child	Ill health (M = Mental)	Total
1	1	..	1	..	1	..	1	..	..	..	..	..	..	4
2	1	1	..	..	..	..	1	5
3	1	..	..	1	..	1	..	..	..	..	..	3
4	..	1	..	..	1	..	..	..	..	1	..	..	..	3
5	1	..	..	1	..	..	..	..	1	..	3
6	..	1	..	..	..	..	1	1	..	..	..	..	..	3
7	1	1	1	1	1	1	..	..	..	..	6
8	1	1	..	..	..	..	..	2
9	1	1	..	..	..	..	2
10	1	..	1	..	..	..	..	M	..	3
11	1	1	1	1	..	..	..	..	4
12	1	..	..	1	1	1	..	..	..	1	..	3
13	1	..	..	..	..	..	..	..	..	1
14	1	..	1	..	1	..	1	..	1	..	..	..	..	5
15	1	..	..	..	..	..	..	..	..	..	1	..	..	2
16	1	..	1	..	..	..	1	..	..	2
17	1	..	1	1	..	..	..	..	..	3
18	1	..	1	1	..	1	..	..	..	..	..	..	..	4
19	..	1	..	..	..	..	..	1	..	..	..	..	..	1
20	1	..	1	..	1	..	..	..	..	..	3
21	1	..	..	1	..	..	..	..	M	..	3
22	1	..	..	..	..	1	..	..	2
23	1	1	..	..	1	..	..	..	..	3
24	1	..	1	..	..	..	1	..	..	..	..	3
25	1	..	1	..	..	..	..	..	..	2
26	1	..	..	..	..	..	1
27	1	1	..	..	..	..	..	2
28	1	1	..	..	..	..	..	2
29	1	..	1	1	..	..	..	..	..	3
30	1	1	..	..	..	..	1	1	..	..	..	..	..	4
31	..	1	..	..	..	1	..	1	..	..	..	..	..	3
Totals ..	5	5	5	6	12	8	18	15	6	1	1	1	5	88

Dental Care of Mothers and Young Children (Report of Mr. D. E. Taylor, L.D.S., Senior Dental Officer).—The number of sessions devoted to mothers and pre-school children during the year was equivalent to 0.5 dental officers and 0.5 oral hygienists.

The investigation into the dental condition of three-year old children was carried out as in previous years at the Central School Clinic. The examinations and treatment were done by the Senior Dental Officer.

A summary of the findings for the time the enquiry has been in progress follows.

	1959	1958	1957	1956
Number examined	186	210	280	228
Number free from caries	124	142	162	144
Number treated by extraction ..	5	11	14	8
Number treated by filling	18	18	31	18
Number defective but not treated ..	39	39	68	58

The following types of malocclusions were noted :—

	1959	1958	1957	1956
Distortion of arches by thumb or finger sucking	13	26	32	32
Distortion of arches by "dummy" sucking	18	22	10	14

Hereditary malocclusions :—

Superior protrusion	11	14	4	14
Inferior protrusion	2	—	—	—
Overcrowding	—	1	1	2

Malocclusions where no cause could be found :—

Open bite	1	1	3	—
Cross bite	1	1	2	—
General overcrowding	1	—	1	1

In the year under review there were five cases of excessive overbite where the lower incisors were completely hidden when the teeth were in occlusion.

Parents who wish their children to have regular inspection and treatment are given the opportunity of bringing them three times a year.

It has been found that the incidence of caries markedly increases between four and five years of age. The reason given by the mothers is that children are now able to spend money and are encouraged to buy sweets by older relatives and friends.

Regular use of the toothbrush is advised but the parents are warned that there is no evidence that its use has any effect on the prevention of dental caries. However, it is desirable to acquire the habit of keeping the mouth clean in childhood as the toothbrush used properly is valuable in preventing diseases of the gum in later years.

The new system whereby the mothers wishing inspection and treatment sign the acceptance forms at the Maternity and Child Welfare Clinics instead of forms being sent to all mothers known to be attending has reduced considerably the amount of clerical work and also reduced the time between acceptance and treatment. The change is reflected in the first table where the number of inspection invitations is reduced to less than one-third of the 1958 figure.

WORK OF DENTAL OFFICERS

	Expectant Mothers	Nursing Mothers
No. of inspection invitations	1,727	6
No. of inspection attendances	713	5
No. found dentally fit	29	..
No. accepted treatment	639	4
No. refused treatment	45	1
Total No. of teeth filled	414	54
Type of filling given :—		
Synthetic porcelain	53	14
Cement .. ..	..	..
Amalgam	72	9
Lined Amalgam	327	37
Total fillings given	452	60
Total No. of teeth extracted	853	401
" " " persons fitted with dentures	195	..
" " " other treatments	43	37
" " " local anæsthetics	93	26
" " " general anæsthetics	118	63
" " " treatment sessions		213½
" " " inspection sessions		38½
" " " attendances for treatment..	584	751
" " " persons made dentally fit ..	160	132

WORK OF ORAL HYGIENISTS

	Expectant Mothers	Nursing Mothers
No. of attendances	440	2
" " scalings	440	2
" " treatment sessions		115¾
" " hygiene lecture sessions		173½
" " individuals treated	285	2
" made dentally fit	285	2

NUMBERS PROVIDED WITH DENTAL CARE

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Expectant and Nursing Mothers	718	689	643	579
Children under 5 years ..	552	320	248	218

FORMS OF DENTAL TREATMENT PROVIDED

	Expectant and Nursing Mothers	Children under 5 years
Extractions	1,254	162
Anæsthetics :—		
Local	119	..
General	181	103
Fillings	512	251
Scalings or scaling and Gum Treatment ..	442	..
Radiographs	14	2
Dentures provided :—		
Complete	223	..
Partial	90	..

SECTION 23

MIDWIFERY

BY

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AND

DOROTHY HUMPHREYS, S.R.N., S.C.M.,
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The demand for hospital accommodation for confinement seems to increase. Indeed there is a growing tendency for young mothers to consider that their National Insurance payment entitles them to a maternity bed in hospital.

The number of maternity beds is insufficient to meet this demand and it has been necessary for the hospitals to refuse a considerable number of applications made through the Maternity and Child Welfare Clinics. No mother is refused a hospital bed if there is any medical, obstetric or social reason necessitating a hospital confinement. Home circumstances are always investigated before any mother is asked to arrange a home confinement. This has necessitated 2,080 special visits by domiciliary midwives.

In the domiciliary service there is good co-operation between the private doctor and the midwife. The scheme whereby the midwife ensures that the patient has booked a doctor for maternity medical services continues to work satisfactorily. This arrangement prevents the doctor being called into an emergency, knowing nothing of the patient, and such cases are now a comparatively rare occurrence. Even when the doctor is himself responsible for the ante-natal supervision of the patient, use is being made of the local health authority clinics; patients being referred for blood tests to be carried out and to take advantage of other facilities, such as ante-natal exercise classes, available at the clinics.

Midwifery Training—Part II.—The training school at Redcourt Hostel is becoming increasingly well known, as is shown by the number of applicants from Part I training schools in different parts of the country. The fact that the whole of the six months'

training is taken in district work is found by the pupil midwives to give them greater experience in normal midwifery, and a wider knowledge of social conditions. This is particularly valuable to the midwife who intends to practise district midwifery.

The training course is under the supervision of the midwifery tutor who is superintendent of the training school. There were 25 domiciliary midwives who were approved by the Central Midwives' Board as teachers of pupil midwives; 2 of these were approved during the year. The teacher midwives work in close liaison with the midwifery tutor. They instruct the pupils in their practical work, each midwife being responsible for training one or two pupil midwives.

During the year 44 pupil midwives completed their training. Of these 42 passed the Part II examination of the Central Midwives' Board at the first attempt, and 2 at the second attempt.

On 31st December, 1959 there were 19 pupil midwives in training.

Notified Births.—The total number of births of Leeds cases notified in the city during the year was 8,611. Of these, 5,734 or 66·6 per cent. took place in hospitals or nursing homes, and 2,877 or 33·4 per cent. were domiciliary cases. The comparative figures for 1958 were—hospital cases 68·2 per cent. and home confinements 31·8 per cent.

The number of domiciliary births notified by midwives acting as midwives was 2,429 or 84·4 per cent. of the total domiciliary births.

Notification of Intention to Practise.—The number of midwives who notified their intention to practise as midwives during the year was 185, of whom 6 left the district and one retired, leaving 178 midwives practising in the city on 31st December, 1959. Of these, 108 were employed in hospitals, 24 in private nursing homes, one as a private midwife, and 45 were employed by the local authority.

Only 6 midwives notified their intention to practise as maternity nurses during the year.

Domiciliary Midwifery Service.—The average number of midwives employed by the local health authority in domiciliary work throughout the year was 44 full-time. During the year one midwife retired, 4 midwives resigned and 6 new appointments were made.

On 31st December, 1959, there were 45 domiciliary midwives, including the four midwives undertaking the nursing care of premature babies. In addition, 4 midwives were employed part-time. The number of domiciliary births attended by municipal midwives during the year was 2,860 or 33·2 per cent. of the total births notified in the city. The comparative figures for 1958 were 2,795 or 31·8 per cent.

The following table gives comparative figures for the work done by the domiciliary midwives during 1958 and 1959:—

	1958	1959
Ante-natal visits	22,181	23,043
Attendance at birth { As midwife ..	2,434	2,429
As maternity nurse ..	362	431
Post-natal visits	61,958	65,503
Bookings { As midwife	2,040	2,302
As maternity nurse ..	862	764
Attendances by patients at midwife's clinics	28,746	29,375
No. of patients who had gas/air or Trilene analgesia	2,603	2,561
	=93·1%	=89·5%

Of the 65,503 post-natal visits paid by the midwives in 1959, 4,392 were to patients discharged home from hospital before the 10th day of the puerperium.

Analgesia.—All municipal midwives are qualified to administer Gas/Air and Trilene analgesia and each midwife is provided with the approved apparatus. Every expectant mother who books the services of a municipal midwife is given the opportunity of having analgesia at her confinement unless her doctor certifies her as medically unfit. Of the 2,860 patients attended at home by municipal midwives 2,561 or 89·5 per cent. were given either Trilene and/or Gas/Air analgesia. In 65 cases only, Gas/Air analgesia was used.

Maternity Outfits.—A sterilised and sealed packet containing all dressings required at the confinement, as specified by the Ministry of Health, is provided by the local health authority for every case

attended by a municipal midwife. Outfits are also available for domiciliary confinements attended by private midwives or maternity nurses and may be obtained at the maternity and child welfare clinics. During 1959, 427 outfits were supplied in this way.

Medical Assistance.—During the year 1,025 notifications were received of having called in medical assistance for domiciliary midwifery cases where a doctor was booked for maternity medical services. There were 19 notifications for emergencies under Section 14 of the Midwives Act, 1951, compared with 4 for the previous year, and only 3 claims for payment for attendance were received from medical practitioners.

Supervision of Midwives.—The domiciliary municipal midwives were interviewed each week at the Health Department by the Non-Medical Supervisor of Midwives. She made 286 visits to see midwives in their homes and at their cases, and in addition paid 315 special visits.

SECTION 24

HEALTH VISITING

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,

Assistant Medical Officer of Health for Maternity and Child Welfare

AND

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London),

Superintendent Health Visitor

The total number of visits paid by health visitors was 150,422.

The following table gives comparable figures of the work done in 1958 and 1959 :—

	1958	1959
Notified births, and children under 5 years	104,793	114,777
Children over 5 years	661	499
Stillbirths	160	155
Deaths of children under 5 years ..	180	195
Ophthalmia Neonatorum	*10	*11
Expectant Mothers	3,228	3,307
Adoption visits	*244	*264
Child Minders	*170	*179
Day Nursery admissions and absentees	*80	*87
Tuberculous households	6,197	6,739
Housing reports	538	703
Research Enquiries and adults not classified	3,218	3,224
Cases discharged from hospital ..	..	..
Home Help investigations	17	27
Ineffectual visits	18,845	20,796
Total visits for the year	137,837	150,422

*included in visits to children under 5 years.

Mothers and young children have been visited by the health visitors as in previous years. Selectivity in visiting, and concentration on those families which most need supervision, has continued. With the further development of the housing estates and re-housing of families away from the centre of the city the health visitors have a larger area to cover, involving increased travelling time and so reducing the time available for visits. Children placed for adoption and those in the care of registered daily minders have also been supervised, and health visitors have continued to take part in the practical training of medical, health visitor and other students.

Further information regarding the work of the health visitors is given in this Report in the sections relating to Health Education and Care and After-Care.

HEALTH VISITOR TRAINING

BY

FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A.,
Health Visitor Tutor

The 1958-59 course commenced in October, 1958, with 42 students who registered at Leeds University for the academic year. Leeds City Council had sponsored 12 of this number, the majority of the remainder being attached to other Local Authorities or financed by their own governments if from overseas.

Inaugural week.—Registration at the Central Court along with many students of other faculties is part of an inaugural week which consists mainly of introductory lectures and consultations with the tutors, giving each student a little time to adjust to a new situation, to organise her accommodation and obtain the necessary text books.

In the second week of term the ordinary work of the course began and, having resolved many of their personal difficulties, the students settled down to a routine of lectures and practical work quite happily.

General Health Visiting.—The course proceeded much as before, each student seeing as much as possible, in the time available, of the work of health visitors and school nurses who are very co-operative in the giving of practical instruction. This takes place not only in Leeds where the two services are separated but in other local authority areas where the work is combined to suit scattered

populations. They have also observed routine and selective health visiting and have been encouraged to compare and assess the various methods in different situations and local conditions.

Mental Health.—It has again been necessary to place a good deal of stress on Mental Health in a period of transition. With the new Mental Health Act pending and arrangements for community care proceeding, the students have needed very careful guidance to avoid confusion between the old and the new.

Liaison work.—As usual, visits have been arranged with the co-operation of other Departments concerned and, as always, the individual members of staffs of the Welfare, Children and Mental Health Departments have shown patience and consideration in the instruction of students, which must add considerably to the amount of work performed. The importance of liaison with other statutory and voluntary organisations is illustrated by these visits.

Investigation of Social Problems.—Juvenile delinquency aroused great interest as a problem and after being present at Juvenile Court sessions, seeing a remand home and an approved school, there was much discussion on prevention and treatment of delinquency. With this in mind a visit to a Boys' Club was a particularly interesting experience.

Other problems were treated on similar lines including old age and the care and welfare of deprived children. Various methods of providing care were observed and compared, the emphasis being placed on home and family wherever possible.

Work of the Course.—As usual, the weeks were divided into 3 days of lectures and tutorials and 2 days of practical instruction. During the Easter Vacation each student had a short period of intensive practical work which was found to be very beneficial. Teaching practice was carried out in the third term under the guidance of a member of the Department of Education who was very helpful in giving individual constructive criticism and suggestions for improvement.

Examination.—The examination for Health Visitors was held in July, 1959. One of the Leeds assisted students had withdrawn from the course after completing one term and, out of the eleven who remained, 10 were successful in passing at the first attempt. The student who had failed sat again in December and was successful on that occasion.

SECTION 25

HOME NURSING

BY

EDITH G. MEADOWS, S.R.N., S.C.M.,

Superintendent Home Nurse

For the fifth successive year, the number of new cases referred for home nursing fell. The total number referred was the lowest since the beginning of the National Health Service, the reduction being principally in the number of cases referred by general practitioners. The number of tuberculous patients requiring nursing at home continued to fall, 66 being referred as compared with 593 in 1954 when the demand was at its highest.

SOURCES OF CASES 1957-1959

	1957	1958	1959
General practitioners	7,728	6,931	6,300
Hospitals	2,340	2,143	2,492
All Sections of the Public Health Department	317	150	15
Direct application and/or relatives, etc.	166	124	53
Totals	10,551	9,348	8,860

CLASSIFICATION OF CASES, 1957-1959

Classification	1957		1958		1959	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	7,870	232,746	6,835	219,906	6,270	208,673
Surgical ..	1,666	33,165	1,718	33,114	1,790	35,320
Children under 5 years ..	643	5,369	574	5,337	573	5,282
Pneumonia ..	197	1,854	83	903	107	1,155
Tuberculosis ..	109	6,258	100	5,389	66	3,589
Maternal complications ..	61	341	33	252	45	413
Ophthalmia neonatorum ..	1	2	3	23	..	..
Infectious diseases ..	4	25	2	9	9	55
Totals	10,551	279,760	9,348	264,933	8,860	254,487

There has been a decrease of 488 new patients and 10,446 visits as compared with the previous year. Of the 8,860 patients, 3,911 have received injection treatment of various types, necessitating 129,588 visits.

During the year 3,769 patients aged 65 years and over were nursed and received 151,392 visits compared with 3,857 patients and 152,682 visits during 1958.

The following tables give the number of patients nursed aged 65 years and over and tuberculous patients nursed:—

			Patients	Visits
1957	..	..	3,583	161,216
1958	..	..	3,857	152,682
1959	..	..	3,769	151,392

			Tuberculous Patients Nursed	
			Patients	Visits
1957	..	..	109	6,258
1958	..	..	100	5,389
1959	..	..	66	3,589

Staff.—The nursing staff is as follows:—

		Full-time	Part-time	Staff in terms of full-time
December, 1957	..	59	14	66
„ 1958	..	57	10	62
„ 1959	..	60	9	64½

There are 14 motor cars available for use in the more distant areas of the city.

Medical Requisites Loan Scheme.—The arrangements for the loan of sick-room equipment and medical and surgical requisites have been operated from the depot at Market Buildings. During the year 3,387 articles were loaned, the same number as in the previous year, and 3,230 returned as against 3,399. There were 5,123 applications for extensions of loan periods and 531 persons defaulted with regard to conditions of loan, 55 fewer than in 1958. The number of articles on loan on 31st December, 1959, was 1,235.

CLASSIFICATION OF MEDICAL REQUISITES

Articles						Loaned	Returned
Air rings	..	..	..	..	..	590	600
Bed pans	..	..	..	..	..	816	761
Mackintosh sheets	..	..	..	..	..	884	838
Back rests	..	..	..	..	..	446	451
Urinals	..	..	..	..	..	291	269
Cradles	..	..	..	..	..	113	109
Commodes	..	..	..	..	..	88	68
Crutches	..	..	..	..	..	5	6
Douche outfits	..	..	..	..	..	1	2
Rubber bed pans	..	..	..	..	..	19	20
Bed trays and tables	..	..	..	..	..	5	6
Dunlopillo mattress and cover	..	..	..	..	..	10	9
Wheel chairs	..	..	..	..	..	54	44
Bedstead with chain and pulley	..	..	..	..	..	8	6
Pillows	..	..	..	..	..	6	..
Relaxation chairs	..	..	..	..	..	2	3
Bed blocks	..	..	..	..	..	2	4
Stand pulleys	..	..	..	..	..	8	10
Dietary scales	..	..	..	..	..	1	..
Single bed	..	..	..	..	..	7	5
Mattress	..	..	..	..	..	5	3
Bed with cot sides	..	..	..	..	..	..	1
Walking sticks	..	..	..	..	..	10	3
Plastic covers	..	..	..	..	..	6	..
Hydraulic patient hoists	..	..	..	..	..	2	2
Sputum mugs	..	..	..	..	..	8	10
Totals						3,387	3,230

Training of Home Nurses.—At the end of January the Assistant Superintendent Home Nurse responsible for tutorials and lectures left to take up another post and it was not possible to replace her. With the help of nursing superintendents of other authorities associated with the training it was possible to complete the course ending in April, but in July the training arrangements for the Certificate of the Queen's Institute of District Nursing were brought to an end at the instigation of the Institute. In the meantime the Minister of Health had accepted the recommendations of the Advisory Committee on the Training of District Nurses for a shortened course of training and invited applications from local authorities for approval of training schemes for a national certificate. An application for approval of a shortened course was sent to the Minister of Health in November.

SECTION 26

VACCINATION AND IMMUNISATION

BY

ARNOLD SHAW, M.B., B.S.,

Assistant Medical Officer of Health for Immunisation

Vaccination against poliomyelitis again provided the bulk of the work of the department. A smaller volume of polio vaccination work was done than during last year.

Vaccination against whooping cough and diphtheria immunisation remained fairly constant. Vaccination against smallpox remained at its usual unsatisfactory low level.

One case of diphtheria occurred in a child of 5 years who had received some protection against diphtheria. This case is dealt with fully in the Infectious Diseases section of the Report.

Poliomyelitis Vaccination.—British vaccine was freely available throughout the year. Vaccination of children up to the age of 15 continued satisfactorily, the most marked improvement occurring in the 0-4 age group, where the percentage vaccinated rose from 29·0 per cent. in 1958 to 54·5 per cent. at the end of 1959. The overall vaccination rate of 69·2 per cent. is very satisfactory when it is considered that polio vaccine has been freely available only for about 18 months. To reach a similar state of affairs in diphtheria immunisation took almost 15 years.

The age group 15-26 remained apathetic about polio vaccination until about April when the death from poliomyelitis of a footballer caused a rush to clinics and family doctors. Two evening "open sessions" at the Central Clinic resulted in 5,000 persons being inoculated against poliomyelitis. During this period 19 visits were made to various factories and, as a result, a further 2,500 young people were vaccinated. Unfortunately, for a fortnight during the month of April, it was impossible to obtain further supplies of

vaccine and this resulted in the loss of many potential patients due to cooling of teenage enthusiasm.

At infant welfare clinics a satisfactory attendance for polio vaccination was maintained. The number of expectant mothers vaccinated was 2,749, a great improvement on last year. Of these patients, 680 were vaccinated by general practitioners.

The following tables indicate the progress of the polio vaccination scheme since 1956.

ANTI-POLIOMYELITIS VACCINATION PROGRESS OF VACCINATION SCHEME SINCE 1956

Year of Birth				Number of persons vaccinated with 2 injections				
				1956	1957	1958	1959	Total
1933-42	..	..	..	..	27	1,445	19,738	21,210
1943	..	..	..	..	21	3,063	743	3,827
1944	..	..	..	..	21	4,379	889	5,289
1945	..	..	..	..	27	4,155	836	5,018
1946	..	..	..	..	37	5,419	1,197	6,653
1947	..	..	..	345	2,573	3,376	1,096	7,390
1948	..	..	..	339	2,315	2,989	968	6,611
1949	..	..	..	311	1,980	2,957	872	6,120
1950	..	..	..	302	1,835	3,002	867	6,006
1951	..	..	..	216	879	3,899	897	5,891
1952	..	..	..	53	514	4,067	1,007	5,641
1953	..	..	..	61	559	2,337	1,653	4,610
1954	..	..	..	27	431	2,193	1,791	4,442
1955	..	..	..	..	538	2,224	1,845	4,607
1956	..	..	..	..	407	2,393	2,058	4,858
1957	..	..	..	..	7	2,516	2,724	5,247
1958	..	..	..	..	..	385	4,043	4,428
1959	..	..	..	..	..	..	518	518
Expectant mothers	..	..	..	..	4	988	2,749	3,741
Other groups	..	..	..	..	..	405	394	799
Totals	..	..	..	1,654	12,175	52,192	46,885	112,906

The total for 1959 includes 22,691 by general practitioners. It will be seen that nearly half of the primary polio vaccination work was done by general practitioners. 65,078 third injections were given, including 12,692 by general practitioners.

PERCENTAGES OF CHILDREN IN VARIOUS AGE GROUPS
VACCINATED AGAINST POLIOMYELITIS

Age (years)	0-4	5-9	10-14	5-14	0-14
Percentage vaccinated..	54.5	74.0	78.8	76.6	69.2

ISSUE OF PROPHYLACTIC MATERIAL TO PRACTITIONERS

Material	1958	1959
Diphtheria (T.A.F.)	314 doses	367 doses
Diphtheria (F.T.)	2,538 ..	2,092 ..
Combined diphtheria and whooping cough	3,732 ..	2,745 ..
Whooping cough vaccine ..	3,962 ..	2,346 ..
Diphtheria/Tetanus/Pertussis	3,324 ..	5,901 ..
Combined diphtheria and tetanus .. .. .	..	339 ..
Combined whooping cough and tetanus .. .. .	..	36 ..
Polio vaccine	25,114 doses	60,565 ..

Smallpox Vaccination.—Numbers of vaccinations and re-vaccinations performed during the year are shown in the following table.

	Under 1 year	1-4 years	5-14 years	15 and over	1959 Total	1958 Total
Vaccinated (a)	1,710	255	30	56	2,051	1,615
(b)	2,445	378	110	180	3,113	3,295
Re-vaccinated (a)	1	16	52	616	685	152
(b)	1	37	91	740	869	957
Totals ..	4,157	686	283	1,592	6,718	6,019

(a) by clinic staff.

(b) by general practitioners.

From the returns of primary vaccinations in infants, it is calculated that approximately 49.1 per cent. of the infant population born between July, 1958, and June, 1959, has been protected.

Diphtheria Immunisation.—This is still undoubtedly the most important prophylactic procedure, although at the moment overshadowed by the publicity given to vaccination against poliomyelitis and whooping cough. Over the past few years there has been a slight fall in the total number of primary immunisations against diphtheria. This is the result of the fall in primary immunisations in school children because of the recent inability of diphtheria immunisation teams to work in schools already fully occupied with polio vaccination work. Surprisingly, the number of primary immunisations against diphtheria in pre-school children has risen. This appears to be the result of increased general practitioner work, especially with combined and triple antigens. Since the Public Health Department abandoned the use of multiple antigens there has been a fall in the number of children under the age of 5 years who have been immunised against diphtheria at clinics although the number of whooping cough immunisations at clinics has risen. Undoubtedly some mothers change allegiance from clinics to family doctors when they find that the number of injections given by the family doctor is less. This number is probably quite small; it appears that some clinic patients omit diphtheria immunisation for their children, partly to avoid submitting the child to more injections and partly to go on more quickly to the better-publicised polio vaccination. This is a tendency which could be overcome by the use of multiple antigens. Last year the number of children under 5 years who had whooping cough vaccination at clinics exceeded the comparable diphtheria immunisation by over 500, i.e. if combined antigen had been used then the total number of primary diphtheria immunisations could have been increased by 10 per cent.

In view of this tendency, the position with regard to multiple antigens and provocation poliomyelitis demands re-assessment. When it is realised that the data concerning provocation poliomyelitis was collected several years ago and that since that time there have been great changes in herd immunity against poliomyelitis as a result of Salk vaccination and also that the prevalence in the community of poliovirus may have altered, the need for re-assessment becomes more obvious.

The following table shows the extent of diphtheria immunisation work during the year.

Prophylactic	Clinic doctors :—				General Practnrs.	Total
	I.W.C.'s	Schools	Home visits	Mobile Clinics		
Diphtheria only ..	2,500	245	9	14	757	3,525
Diphtheria/Tetanus	2	..	..	..	12	14
Diphtheria/ Whooping Cough ..	4	..	..	..	831	835
Whooping Cough/ Tetanus .. ..	..	..	..	..	1	1
Triple Antigen ..	41	..	..	..	1,405	1,446
Whooping Cough only	3,078	..	5	..	737	3,820
Total protected against Diphtheria	2,547	245	9	14	3,005	5,820
Total protected against Whooping Cough	3,123	..	5	..	2,974	6,102
Refresher Doses :—						
Diphtheria only ..	36	1,690	..	..	466	2,192
Diphtheria/ Whooping Cough..	..	..	..	..	75	75
Triple Antigen ..	..	..	..	..	91	91
Whooping Cough only	1	..	..	..	8	9

Estimates of the Child Population immunised against Diphtheria.—

Estimates of the child population immunised against diphtheria at 31st December, 1959, and in previous years are shown in the following table.

Year	Percentage in age group			
	0-4 years	1-4 years	5-14 years	0-14 years
1952	72.5	79.3	94.5	86.4
1953	70.5	78.0	94.0	85.8
1954	67.1	73.3	96.1	86.1
1955	65.2	72.2	95.0	85.0
1956	64.0	70.6	94.3	84.2
1957	61.0	66.9	94.5	83.3
1958	59.6	65.0	93.6	82.1
1959	58.8	62.7	91.5	80.4

The table on page 93 shows the progress of the diphtheria immunisation scheme since its inception.

Home Visiting.—This service is provided for the benefit of mothers who, for some good reason, are unable to bring their children to the clinic. During the year 37 visits were made.

Whooping Cough Immunisation.—The following table shows the progress of whooping cough immunisation since 1947. It will be seen that the percentage of children under 5 years at present protected is very satisfactory.

Year				Percentage of children under 5 who had Whooping Cough prophylactic	Number immunised against Whooping Cough
1947	..	..	..	..	975
1948	..	..	..	..	908
1949	..	..	..	..	1,016
1950	..	..	..	..	1,537
1951	..	..	..	..	3,801
1952	..	..	..	..	3,892
1953	..	..	..	..	4,877
1954	..	..	..	53·4	5,276
1955	..	..	..	57·6	4,593
1956	..	..	..	60·0	5,238
1957	..	..	..	62·8	4,894
1958	..	..	..	69·2	6,504
1959	..	..	..	70·1	6,102
Totals .. ..				..	49,613

Inoculations for Travellers going Overseas.—The number and type of inoculations are shown below (for completed courses).

Smallpox vaccination	..	750
T.A.B.	.. ..	366 (and 10 refreshers)
Cholera	.. ..	292 (and 4 refreshers)
Tetanus	.. ..	71 (and 6 refreshers)
T.A.B.T.	.. ..	7 (and 1 refresher)

Other Work undertaken by the Department.—*Research.*—In co-operation with the Medical Research Council, the investigation into the properties of Formol Toxoid continued.

Examination of Convalescents.—During the year 673 applicants for convalescence, including 523 children were medically examined.

Training.—Lecture-demonstrations on immunisation were given to student health visitors.

Voluntary Workers.—We are grateful to the Ladies of the Leeds Babies' Welcome Association for assistance at immunisation clinics.

DIPHTHERIA IMMUNISATION.

Illustrating the progress of the Immunisation Scheme since its inception.
Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation	1928-1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	Total
Under 1 year ..	1,075	75	24	..	..	..	..	..	788	3,127	3,301	2,561	3,479	3,450	3,143	3,241	2,678	3,077	3,177	3,247	3,669	Total
1-3 years ..	2,789	411	941	3,980	3,990	4,412	5,110	5,137	5,304	4,923	3,078	2,931	2,714	2,056	1,757	1,898	1,658	1,857	1,413	1,506	1,277	Total under 5 years at end of 1959
2-3 ..	2,586	173	814	2,202	1,024	469	240	777	418	455	438	457	514	391	234	295	247	266	208	211	285	
3-4 ..	2,984	121	943	2,053	1,063	463	220	557	327	220	231	249	277	212	137	144	128	142	111	103	135	
4-5 ..	3,622	62	865	1,940	1,043	381	257	463	288	280	196	147	193	152	111	146	102	102	70	64	86	
5-6 ..	4,963	30	1,563	1,486	1,667	451	359	556	366	323	328	290	263	321	274	270	338	301	288	195	59	
6-7 ..	5,183	10	1,450	940	1,622	302	233	467	296	229	286	215	234	320	348	315	393	387	262	194	96	Total
7-8 ..	4,254	6	1,174	676	1,482	197	185	392	225	165	143	141	108	144	147	191	217	174	117	99	96	Total 5-10 years
8-9 ..	3,498	6	979	466	1,357	164	188	275	153	126	132	95	72	71	109	99	133	101	68	43	35	31,064
9-10 ..	3,342	3	926	325	1,271	157	142	259	142	110	119	70	51	65	88	70	82	79	62	34	18	
10-11 ..	3,558	4	892	252	1,197	130	152	250	100	90	108	79	64	61	71	63	57	55	41	13	23	
11-12 ..	3,400	4	921	205	1,089	109	128	249	113	67	73	60	55	37	31	42	40	26	27	18	9	Total
12-13 ..	3,367	5	839	193	1,193	96	109	185	97	80	69	55	40	48	28	26	43	33	6	14	5	Total 10-15 years
13-14 ..	3,037	7	704	175	1,035	78	79	138	100	61	55	35	40	48	25	29	24	21	23	12	6	37,938
14-15 ..	664	..	74	148	382	8	29	34	13	49	54	31	27	38	23	20	41	29	23	24	11	
15 years and over	1,578	37	65	..	..	55	79	83	43	53	54	48	23	42	4	8	10	8	13	10	10	Total 15 years & over
Age not known	700	213	34	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Total 126,015 Total age not known 958
TOTALS ..	50,600	1,167	13,208	15,101	19,415	7,483	7,510	9,822	8,773	10,338	8,665	7,464	8,154	7,456	6,510	6,857	6,189	6,660	5,904	5,808	5,820	218,904

SECTION 27

AMBULANCE SERVICE

BY

J. H. DAYKIN

Ambulance Officer

Details of work carried out by the Ambulance Service are shown in the following table. It will be noted that the number of cases carried has risen substantially although mileage has not risen in proportion. 12,096 cases have been removed in excess of the 1958 totals, including 10,423 out-patients; whilst the total of miles run has increased, actual miles per patient have fallen from 3.695 in 1958 to 3.605 in 1959.

CASES REMOVED IN 1959

Type of Case	Number	Mileage
By Ambulance :—		
Road accidents	2,374	} 366,698
Other accidents	2,367	
Emergency calls for illness	5,073	
Maternity	3,970	
Infectious diseases	1,051	
Mental	240	
Hospital admissions and discharges	18,028	
Special treatment and out-patients	35,463	}
Others (incl. fruitless journeys)	4,894	
Total	73,460	
By Sitting Case vehicles :—		
Maternity and Child Welfare	96	} 486,804
Special treatment and out-patients	159,221	
Immunisation	38	
Doctors and Midwives	2,024	
Others (incl. fruitless journeys)	1,886	
Total	163,265	
Mortuary Service :—		
Bodies removed	808	5,497
Totals	237,533	858,999
Hospital Car Pool :—		
Special treatment	4,671	25,678
Grand Totals	242,204	884,677

In addition to the foregoing, 4,620 cases were removed from Leeds under co-ordination arrangements.

COMPARATIVE TABLE

	1954	1955	1956	1957	1958	1959
Cases :—						
Ambulance ..	77,475	68,667	70,000	66,442	68,690	73,460
S.C. vehicles ..	141,574	164,245	164,135	155,015	155,939	163,265
Total ..	219,049	232,912	234,135	221,457	224,629	236,725
Mileage :—						
Ambulance ..	372,221	352,701	355,561	348,715	350,394	366,698
S.C. vehicles ..	469,358	504,117	503,619	483,427	479,757	486,804
Total ..	841,579	856,818	859,180	832,142	830,151	853,502
Hospital Car Service :—						
Cases ..	19,459	14,375	10,017	8,572	5,145	4,671
Mileage ..	113,654	91,502	69,141	59,509	34,490	25,678

“ 999 ” Calls.—The total number of “ 999 ” calls received by the Ambulance Service during the year was 6,271.

Staff.—The establishment is now made up as follows :—

Administrative :—

Ambulance Officer ..	..	..	..	..	1
Station Officers ..	..	..	..	..	2
Control Clerks (Male)	..	..	..	..	7
Radio-telephone Operators ..	..	..	..	..	2
Control Clerks (Female)	..	..	..	..	2
Clerk-Telephonist ..	..	..	..	..	1

Operational :—

Shift Leaders ..	..	..	..	..	5
Driver/Attendants (Male) ..	..	..	..	..	82
Driver/Attendants (Female)	..	..	..	..	2
Female Attendants ..	..	..	..	..	17
Mortuary Service Drivers ..	..	..	..	..	2

Maintenance :—

Mechanics ..	..	..	..	..	2
Semi-skilled hands	2
Vehicle washers	2
Garage hands	2
Storeman	1

Domestic :—

Cleaners, female	2
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The chief clerk is now employed at the Public Health Department, East Parade, and the services of a part-time cleaner at Armley Ambulance Sub-Depot have been dispensed with on the closing-down of that Depot. Thus the overall establishment has been reduced by two.

Vehicles.—The vehicular strength of the Ambulance Service remains at 55 vehicles, made up as follows :—ambulances 27, sitting-case ambulances 18, sitting-case cars 8 and mortuary vans 2.

Three Morris Commercial Ambulances (diesel-engined) were delivered to replace a similar number of Austin Wayfarer Ambulances now unserviceable. Three Morris Commercial Sitting-Case Ambulances are on order and delivery is expected early in the new year. These vehicles are designed to carry 11 patients and they, too, are diesel-engined. It is anticipated that a considerable economy in fuel consumption will result from these vehicles.

Accidents.—There were 42 accidents to vehicles of the Service during the year. The average is thus one accident per 21,064 miles, an improvement on the previous year.

Equipment.—A simple system of controlling the issue and return of certain items of equipment has been introduced and has shown a considerable improvement in the quantity and quality of equipment available at all times. First Aid haversacks are carried on all vehicles of the Service.

Telecommunications.—The equipment now in use is nearing the end of its economical life. Maintenance costs have risen steeply although this may be due partly to an enforced change in the firm carrying out maintenance. In order to comply with regulations issued by the Postmaster General, it may be necessary to replace the equipment in the near future. The radio-telephony system becomes yearly more indispensable. On the rare occasions when the system has been out of action it has been found impossible to comply with all requests made on the Service.

Buildings.—The Central Ambulance Station has now been completely repainted inside and presents a strikingly fresh appearance. Work has commenced on providing “up and over” doors to the workshop bays—a measure which will greatly improve the working conditions of the maintenance staff. The closure of Armley Ambulance Sub-Depot as an operational station and the accommodation of its seven vehicles in the Central Ambulance Station

has caused some strain on storage capacity. Originally designed to hold 50 vehicles, it is now required to house some 66, leaving no margin for possible expansion of the Service.

Vehicle Maintenance.—Considerable work has been carried out during the year on the upkeep and repair of vehicles. Three Daimler Ambulances and four Morris Commercial Ambulances have been completely overhauled during the year and are now classified as Grade II. Certain of the older types of Morris Commercial Ambulances are now beyond economical repair and it is hoped to replace them in the coming year. This applies to the sitting-case cars also, each of which has done not less than 150,000 miles. Henceforth it is hoped to carry on the policy of overhaul and replacement to ensure that maximum service is obtained from each vehicle.

Civil Defence Training.—A number of the Driving Staff have received Civil Defence training during the year. Training for volunteers of the Ambulance and Casualty Collecting Section of the Leeds Civil Defence Division has been carried out by the Ambulance Officer and members of the staff. Vehicle maintenance courses are now running and it is hoped to start driving instruction in the near future.

Co-operation with other Authorities.—There have been no difficulties in maintaining good relations with the Ambulance Services of other and contiguous Authorities. The Leeds Agreement is well used and presents no problems. Meetings of the participants of the Agreements have been found unnecessary.

Liaison with Hospitals.—Four meetings have been held with the two major hospitals in Leeds. Frank discussions took place and much greater integration has resulted. Cases of abuse have been investigated and eradicated and it has been found that personal contact with departments using the Service has mutual advantage.

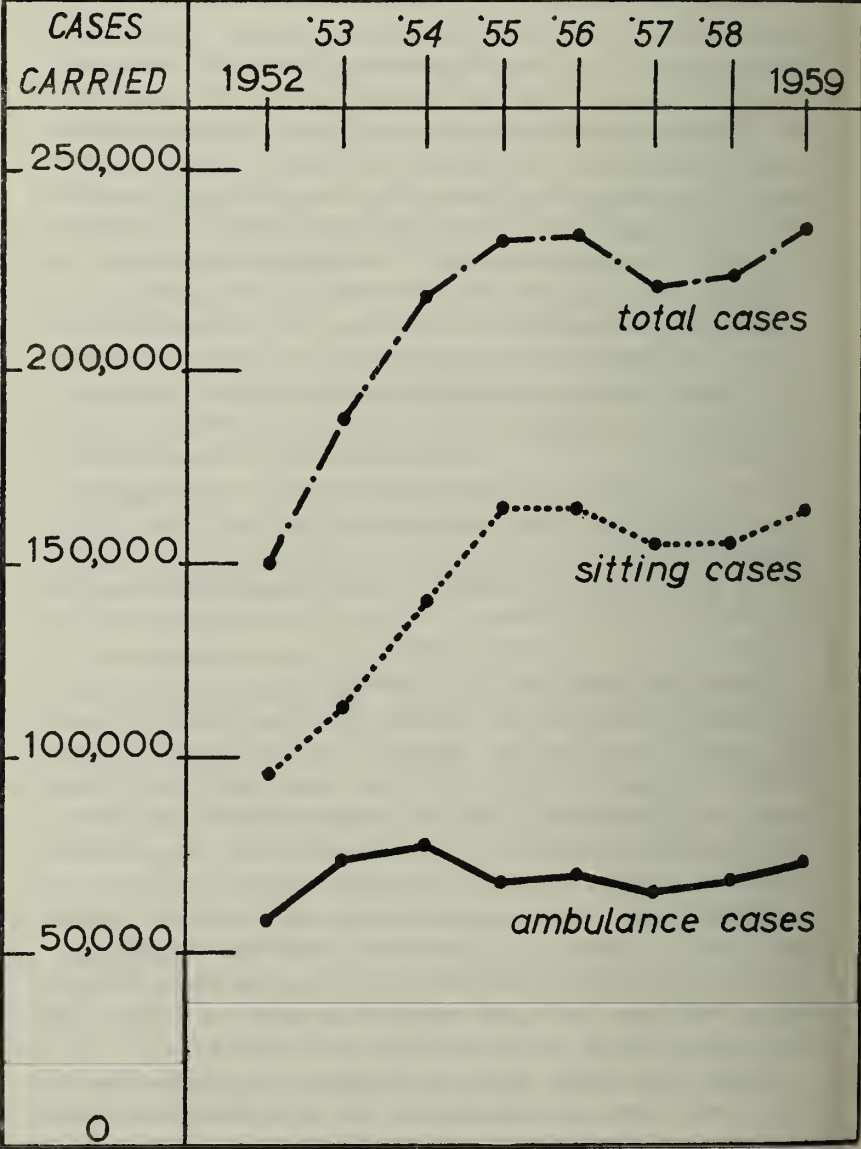
Hospital Car Service.—The Hospital Car Service has continued to deal with requests helpfully and efficiently.

Competitions.—A team was entered in the Competition organised by No. 3 Region of the National Association of Ambulance Officers. Despite the fact that this was the first time for many years that a team from Leeds had competed, a result of sixth out of eleven was obtained, a very creditable achievement.

Babies Born Before Arrival at Hospital.—During the year 24 babies were born in ambulances. No difficulties have been experienced in obtaining the services of midwives.

CITY OF LEEDS

AMBULANCE SERVICE



SECTION 28

PREVENTION, CARE AND AFTER-CARE

INCLUDING

HEALTH EDUCATION AND PUBLICITY

VENEREAL DISEASES

MEDICAL-SOCIAL WORK (GENERAL)

CONVALESCENT TREATMENT

CARE AND AFTER-CARE (HEALTH VISITING)

Other aspects are dealt with on pages 40 and 43 (TUBERCULOSIS) and page 118 (MENTAL HEALTH)

HEALTH EDUCATION AND PUBLICITY

Local Activities.—As in previous years, lecturers were provided to address youth clubs, associations and the like on various health topics. This is a valuable method of health education and the Department is always pleased to assist organisations by providing lecturers.

Posters, Leaflets, etc.—Copies of all posters and leaflets issued by the Central Council for Health Education have been received, and where appropriate, have been distributed within the city. Copies of the "Better Health" Journal were distributed monthly to out-patient departments of the hospitals in the city and to the infant welfare clinics. Six former Empire Marketing Board frames have again been utilised for the display of posters.

Hygiene.—Publicity material bearing on the clean handling of food was issued to catering establishments in the city.

National Activities.—Government sponsored press and poster publicity in relation to diphtheria immunisation and other health subjects has been maintained during the year and Leeds has shared in the benefits.

The Health Visitors' Part in Health Education.—The increasing demands of other aspects of the service prevented the health visitors from playing an active part in health education.

However, requests for talks to outside organisations were met and 33 talks were given during the year. This total includes 12 classes for adolescent girls in connection with the Duke of Edinburgh's Award Scheme. Most of this work was undertaken voluntarily in the evenings.

At the request of the Manager, a display to encourage immunisation and vaccination was arranged in the foyer of the Odeon Cinema for two weeks in September when the film "The Diary of Ann Frank" was shown.

Posters designed by one of the health visitors were displayed in the entrance to the Health Department whenever possible, but regular meetings of the "Health Education Group" were not held because of pressure of other work.

Lectures to Students.—Health visitors continued to give talks and demonstrations to health visitor students on testing young children for deafness and the supervision of tuberculous contacts.

Two health visitor students took part in "Evaluation Sessions" held at St. James's Hospital for student nurses who had previously been out visiting with health visitors, district nurses and midwives.

The Health Visitor Tutor and Superintendent Health Visitor continued to give lectures to student nurses at Leeds General Infirmary and St. James's Hospital respectively.

VENEREAL DISEASES

BY

R. D. CATTERALL, M.R.C.P.,

*Physician in Charge,
Department of Venereology,
The General Infirmary, Leeds*

The most important trend in 1959 has been the continued rise in the number of new cases of gonorrhœa. This increase has occurred in both men and women and has been particularly marked amongst young women of the age group 17 to 21 years. The highest incidence in men occurred in an older age group, between 23 and 26 years. The increasing incidence of gonorrhœa is a cause for anxiety, especially as strains of the gonococcus which are relatively resistant to penicillin are being identified in a significant proportion of the cases.

Non-gonococcal urethritis in men has shown a further increase. This condition can give rise to serious complications in the form of arthritis or eye disease and is a source of great worry and unhappiness to patients. The number of women with "other conditions" has also risen considerably. Many of these patients complained of vaginal discharge and some of them were the contacts of men suffering from non-gonococcal urethritis.

There was no case of early infectious syphilis during 1959. The number of new patients in the later stages of the disease was fewer than in 1958. In this regard it must be remembered that some patients with cardiovascular and neurosyphilis are treated elsewhere than at the clinics but it is impossible to estimate their number. No new cases of congenital syphilis in infants under one year were seen but it cannot be stated too often that ante-natal blood tests provide the means of complete elimination of congenital syphilis from the community.

The situation with regard to infectious syphilis is satisfactory at present from a public health point of view. On the other hand, failure to check the continuing rise in gonorrhœa and non-gonococcal urethritis presents a serious challenge. Much infection is spread by unsuspected carriers of the disease and to trace, treat and educate

these people is of the greatest importance and requires the help of skilled outdoor social workers. We have been fortunate in having the assistance of three health visitors, Miss E. C. Clarkson, Miss K. Nutter and Miss V. M. Fahy, who have done invaluable work in contact tracing and case holding. Mr. F. Matthews is now available to visit selected men patients when required.

During the year, Miss E. M. Booth, working as part-time Almoner, has provided invaluable help to many patients.

Owing to the increased volume of work on the female side of the clinic, extensive alterations have been started to provide more room and better facilities for examination of the patients. Throughout all this upheaval Sister M. Fox and her staff have maintained their cheerfulness and efficiency and the clinics have continued as usual.

An increase in venereal disease is not only a medical and public health problem but is also a symptom of a more widespread social malaise. Immigrants far from home, casual workers and children from unhappy and broken homes form a large proportion of the patients seen. Opinions differ as to how to deal with these problems but the answer to the basic question of promiscuity is social rather than medical. It is to be hoped that increasing attention will be directed to this aspect of the problem.

***NEW PATIENTS REGISTERED AT THE VENEREAL DISEASES CLINIC
AT THE GENERAL INFIRMARY AT LEEDS**

	Year 1959		Year 1958		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis	36	34	42	41	-6	-7
Yaws	3	..	13	3	-10	-3
Gonorrhœa	476	162	414	129	+62	+33
Non-gonococcal urethritis ..	271	..	229	..	+42	..
Other conditions	607	456	591	318	+16	+138
Total	1,393	652	1,289	491	+104	+161
Total attendances	8,783		6,877		+1,906	

* Patients suffering from a condition for which they have already received attention at another V.D. clinic have been excluded from the table and the 1958 figures have been adjusted accordingly.

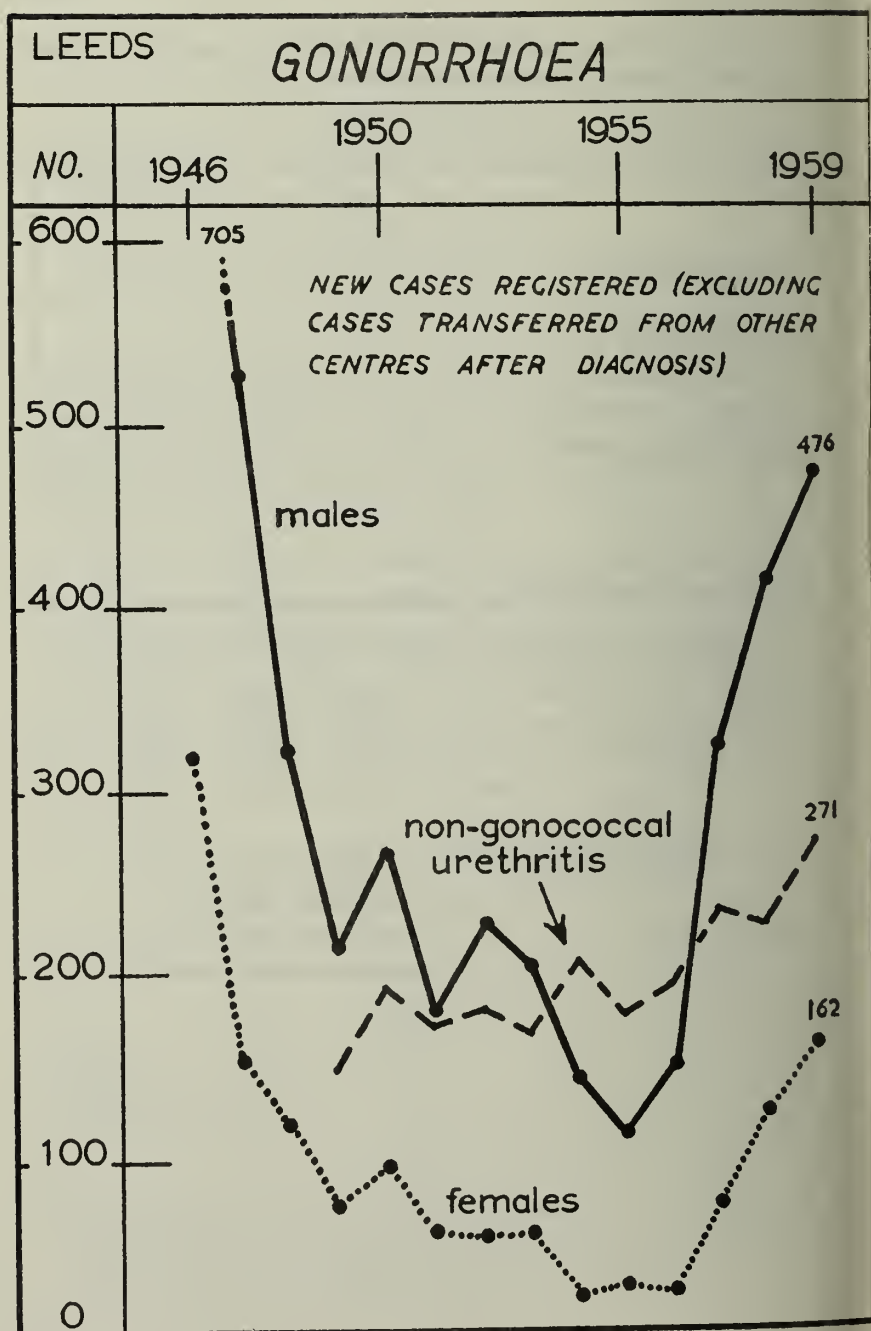
Details of new patients resident in Leeds registered during 1959 are given in the following table:—

LEEDS PATIENTS.

	Year 1959		Year 1958		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis, acquired						
Early .. .. .	..	..	3	1	-3	-1
Late	26	19	32	31	-6	-12
Syphilis, congenital						
Under 1 year old ..	..	..	..	..	..	..
Over 1 year old ..	1	9	..	4	+1	+5
Yaws	3	..	11	3	-8	-3
Gonorrhœa	415	128	381	113	+34	+15
Non-gonococcal urethritis	209	..	171	..	+38	..
Other conditions ..	445	382	434	281	+11	+101
Total	1,099	538	1,032	433	+67	+105
Total attendances	7,163		5,760		+1,403	
Total No. of In-patient days ..	3,155		3,187		-32	

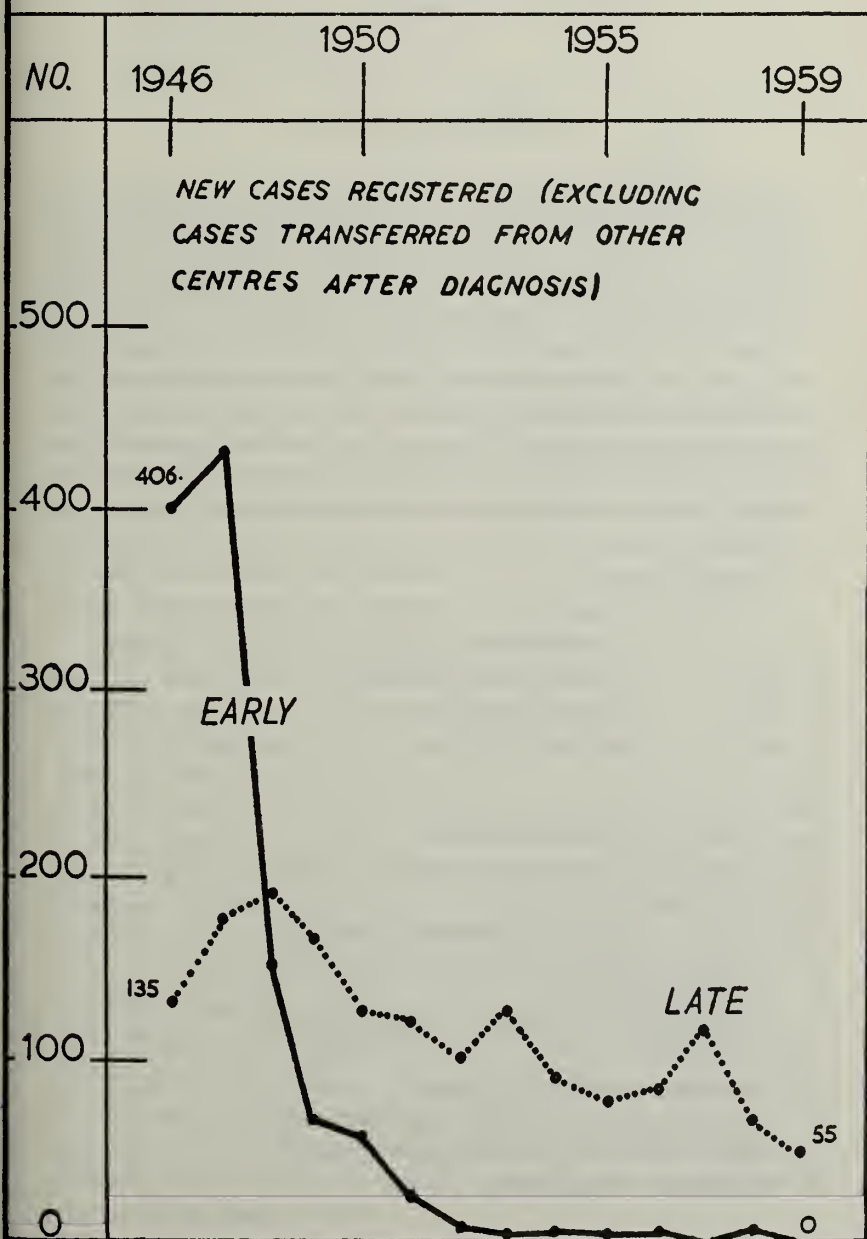
Number of Leeds patients under treatment or observation at 31st December, 1959:—

	Males	Females	Total
Syphilis	214	168	382
Yaws	11	1	12
Gonorrhœa	131	49	180
Non-gonococcal urethritis	62	..	62
Other conditions ..	105	58	163
	523	276	799



GONORRHOEA—Item 12 of Ministry of Health Form V.D. (R)
 NON-GONOCOCCAL URETHRITIS—Item 20 of Ministry of Health Form V.D. (R)

LEEDS

ACQUIRED SYPHILIS

ACQUIRED SYPHILIS—Item 4 of Ministry of Health Form V.D. (R)

"Early"=Primary, secondary and latent in the first year

"Late"=All other cases

MEDICAL SOCIAL WORK

(General)

BY

ISOBEL B. PATON

Medical Social Worker

Type of Case dealt with.—During the year 236 cases were referred to the Social Workers. As in previous years they were referred by medical practitioners, almoners, National Assistance Board officials, probation officers and other social agencies. Letters to the Medical Officer of Health brought some cases to notice as did requests from City Councillors and Magistrates. Pre-admission visits were made for the Chief Geriatric Consultant at St. James's Hospital and these visits brought further cases to notice. They do not include patients who were taken to hospital and referred again on their discharge. Many of the cases required assistance in more than one category but the following table shows only one request per applicant.

Hospital cases :

After-care (geriatric) St. James's Hospital	24
„ (acute wards) „ „ ..	7
„ Leeds General Infirmary ..	30
„ Royal Bath Hospital	14
„ other hospitals	10
	—
	85
Visits for hospital almoners	41
Visits re non-attendance at out-patient clinics	17
Old people living alone	11
Visits re admittance of patients to hospital..	8
Visits re patients in hospital worried about family at home	7
Visits re patients admitted to hospital but not kept in	6
Convalescence, nursing homes	6
Cases referred to Mental Health Department	5
Patients visited by Consultants but not to be admitted immediately	4

Continued on next page

Letters to Medical Officer of Health	..	3
Complicated home conditions of patients		
referred to hospital	.. .. .	3
Miscellaneous cases	.. .. .	40
		<hr/>
		236
		<hr/>

The above cases and after-care patients have meant much work with several offices of the National Assistance Board, Ministry of Pensions and Ministry of Labour. The Social Workers appreciate very much the assistance given to them by Area Officers and their staff.

After-Care of Patients discharged from Hospital.—These patients are visited according to their need. Several of the old people who have been visited have died and some have again been in hospital and referred on their discharge. The old persons living alone and with no family are visited more frequently. The Geriatric Almoners are notified about a patient's condition from time-to-time. The co-operation between the Almoners at the various hospitals and the Social Workers is most cordial.

Medical Service for the Elderly and Chronic Sick.—During the year the Social Workers have visited 1,194 patients on the waiting list for the Geriatric Unit of St. James's Hospital. The general practitioners now advise their patients about being visited and so arrangements are made for someone to be there when the call is made. In many cases it does help to reassure the patient and family on many points, e.g. personal belongings needed in hospital, finance and that the Almoner will advise them when they are admitted to hospital. It enables the Social Workers to give advice regarding National Assistance, the loan of medical requisites and home help.

The request for temporary admission of the chronic sick to enable their relatives to have a holiday is now being made much earlier in the year. This scheme is greatly appreciated by the families.

During the year 673 visits were paid to new cases and 1,846 to old cases ; 169 visits were received from new cases and 82 from old cases ; 526 visits were paid to hospitals, the Magistrates' Court and other social agencies in the city. 77 visits were made on behalf of the Home Help Assessor.

Social Care of the Unmarried Mother.—During 1959, 157 women and girls having an illegitimate child were visited and advised. In 118 cases it was the first child, in 24 the second, in 6 the third and in 2 the fourth child. Seven married women having an illegitimate child were referred for help.

Of the 157 women and girls visited, 40 girls were to be married, 33 intended to return home from hospital, 20 to their lodgings and 3 to friends or relations. 11 girls decided to have a home confinement and 8 were returning to live with the putative father; of these 8, four hoped to marry. Fifteen girls applied for admission to Mount Cross Mother and Baby Home, 6 to Browning House and 2 to St. Margaret's Home. One girl went to the Royal Association Home for the Deaf. Three girls were referred to the Roman Catholic Social Worker and 6 to the Church of England Moral Welfare Worker. Two girls left Leeds, 4 girls had miscarriages and 2 girls disappeared. One girl went into a private nursing home.

Girls referred by doctors or other social workers were referred to the Department's Infant Welfare Centre in the district in which they lived; this meant that all the women and girls attended infant welfare centres. Twelve girls were assisted in obtaining affiliation orders. In some cases the girls were referred by the National Assistance Board.

After-Care.—The after-care of girls going into Mother and Baby Homes is done by the staffs of the Homes. Where girls have their babies in hospital or at home, they are invited to revisit the Senior Social Worker for help with an affiliation order or with any future difficulties.

Two unmarried mothers who were helped, and who are now married, have returned to offer accommodation to girls in difficulties. These offers have been greatly appreciated. Occasionally the request is made for accommodation for a girl and her baby.

General.—During the year the Senior Social Worker has attended the monthly meetings of St. Margaret's Committee and the Mount Cross Mother and Baby Home. She has attended the quarterly meetings of the Leeds Council of Social Service Old People's Welfare Committee and the evening meetings of the Voluntary Workers. Both Social Workers attended the meetings of the Social Workers' Club.

The Social Workers greatly appreciate the Christmas Food Parcels donated by the "Yorkshire Evening News." 78 were delivered to house-bound old people, most of whom had been patients in the Geriatric Unit of St. James's Hospital or the Leeds General Infirmary.

This year, as part of their training in citizenship, the Girl Guides of Roundhay District decided to visit some chronic sick people who would not get a parcel at Christmas. The Social Workers gave 13 names to Mrs. S. A. Codd, District Commissioner, and the Guides took a parcel to each of the elderly people. This was greatly appreciated by the recipients.

Thanks are due to the Editor of the "Yorkshire Evening Post" for toys and to the British Red Cross Society and Women's Voluntary Services for help with clothing and blankets. The Social Workers would like to thank all the people who donated clothing, furniture and gifts of food and books. These gifts have all been appreciated and helped to bring some sunshine into the homes of many.

CONVALESCENT TREATMENT

During 1959, 2,065 applications for convalescent treatment were received and 40 were brought forward from 1958, making a total of 2,105, as compared with 2,082 for the previous year. Of this number, 1,470 patients were sent to convalescent homes, 607 applications were withdrawn or refused and 28 were held over until 1960.

The following table gives details of the number of adults and children sent for convalescence and the number of weeks per patient.

	Adults	Children
Number sent for convalescence ..	953	517
Weeks away	1,906	1,144
Extensions (weeks) .. .. .	..	2
Total number of weeks away ..	1,906	1,146
Average number of weeks per stay ..	2	2

A charge of £2 2s. is made to each adult person receiving two weeks convalescent treatment.

Provision for the health and welfare of patients in all the Homes now in use is very satisfactory. In most cases patients show a marked improvement after a period of rest and comfort at the Convalescent Homes. This is particularly seen in the rapid return to health of many patients suffering from overwork or nervous strain.

During the year 137 mothers, with 142 babies, were sent to the Southport Home. No admissions had to be postponed this year because of infection. The Ambulance Service has continued to provide transport for children and for mothers with babies. W.V.S. escorts have given invaluable help with the children.

150 adults and 523 children attended at the Central Clinic for medical inspection prior to admission to Convalescent Homes.

The allocation of patients to the various homes is shown as follows :—

Home	Adults	Babies	Children	Total
Southport (Mother and Baby Home) ..	178	142	3	323
Blackpool (Horncliffe)	234	..	5	239
Blackpool (Westwood)	126	..	..	126
Bridlington (Yorkshire Foresters) ..	78	..	12	90
St. Annes (Ormerod) .. ..	..	..	110	110
St. Annes (Blackburn)	102	..	..	102
St. Annes (Seabright)	89	..	..	89
Morecambe (Craig) .. ..	..	..	140	140
Southport (Milne)	94	..	3	97
Grange-over-Sands (Boarbank Hall) ..	27	..	..	27
St. Annes (Rochdale Home) .. ..	..	..	102	102
Southport (Jewish Home)	1	..	..	1
Chathill (Shoreston Hall)	4	..	..	4
Harrogate (Metcalfe Smith)	20	..	..	20
Totals	953	142	375	1,470

The following table gives monthly statistics of cases sent for convalescence :—

	Adults	Mothers and Babies		Children	Total
		(M)	(B)		
January ..	20	..	..	9	29
February ..	27	..	..	10	37
March ..	56	..	..	25	81
April ..	72	19	21	39	151
May ..	132	27	27	44	230
June ..	104	20	21	43	188
July ..	117	20	20	56	213
August ..	100	16	17	29	162
September ..	96	20	20	32	168
October ..	74	14	15	46	149
November ..	12	1	1	12	26
December ..	6	..	..	30	36
Total ..	816	137	142	375	1,470

CARE AND AFTER-CARE (HEALTH VISITING)

BY

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)
Superintendent Health Visitor

Visits to the sick, aged and handicapped were continued as in other years but insufficient time was available for this part of the health visitors' work because of the demands made by a large number of births. The follow-up of diabetic and other patients discharged from hospital was continued and good liaison was maintained with officers of the Welfare Services Department and hospital almoners.

There was a further increase in the number of visits paid in connection with rehousing on medical grounds and the total of 703 was 165 more than the total for 1958 and almost double that for 1957.

Tuberculosis Visiting.—Newly notified cases were all visited and arrangements made for the examination of contacts. The close supervision of sputum positive patients and their contacts was continued and the number of effective visits paid increased from 4,998 in 1958 to 5,500. There were also 1,239 ineffective visits.

Much of this visiting had to be carried out on Saturday mornings, in the evenings and during lunch hours, in order to avoid inconvenience for patients who were working.

Mental Health.—The course of lectures arranged by Drs. Lealy and Little of the Psychiatric Unit, St. James's Hospital, in 1958 had been so successful that a second course for another group of 12 health visitors was held early in 1959. A third and final course was begun just before Christmas and all the health visitors were agreed that the lectures greatly increased their knowledge and understanding of mental illness.

Close co-operation with the psychiatric social workers and mental health workers of the Mental Health Services continued whenever the health visitors' duties brought them into contact with the mentally sick and mentally defective.

Venereal Disease.—The increased incidence of venereal disease and the need for more follow-up visits to defaulters from clinics resulted in a considerable increase in the number of visits paid. In August it was necessary to allocate two additional health visitors for part-time venereal disease visiting; from then onwards one health visitor undertook the visiting in South Leeds and two shared the work in North Leeds.

The total number of visits paid during the year was 283 as compared with 94 in 1958.

Special Surveys.—The Medical Research Council's Survey which has been carried out to ascertain the efficacy of B.C.G. vaccination was in its eighth year and reached its final phase.

The investigation into the number of poliomyelitis carriers in the child population was completed and no new surveys were begun during the year.

The total number of effective visits for research purposes and to the sick, aged and handicapped was 3,954.

This is still very small compared with the total of 108,377 visits to children under five years but the case loads now carried by all the health visitors are so heavy that it is not possible to give adequate time to the wider range of duties which they should be undertaking.

SECTION 29

HOME HELP SERVICE

BY

Mrs. DOROTHY W. ALFORD

Organiser

At 31st December, 1959, the Home Help employees numbered:—

Whole-time	..	..	..	..	75
Part-time	..	..	..	..	195
					<hr/>
					270
					<hr/>

During the year 3,779 applications for help were received. Of these, 2,307 cases received help. 1,122 applications were withdrawn; reasons for withdrawal were:—(i) death of the patient, (ii) removal of the patient to hospital, (iii) private arrangements being made for the care of the patient, (iv) cost of the proposed service and (v) emergency over before help could be provided.

The cases helped were brought to the notice of the Home Help Service by the following:—

Blind Welfare Department	..	62	(2·7%)
Welfare Services Department	..	265	(11·5%)
Hospitals	.. ..	334	(14·5%)
General medical practitioners	..	378	(16·4%)
Midwives and district nurses	..	147	(6·4%)
Chest Clinic	.. ..	11	(0·5%)
Mental Health Services, W.V.S., National Assistance Board, Church workers, relatives and members of the public	.. ..	1,110	(48·0%)

Cases which received help are classified as follows :—

Maternity (including expectant mothers) ..	456
Chronic sick, aged and infirm	1,199
Others	631
Tuberculosis	21

2,307

N.B.—Each case is counted once only, although help may have been provided intermittently from January to December.

HOURS GIVEN TO CASES HELPED DURING 1959.

1959	Type of case								Total
	Maternity	Old Age Pensioners	Blind	Emergency Illness	Hospital Discharge	Chronic Sick	Tuberculosis	Nights	
Jan. ..	2,780	15,117	1,563	2,956	3,126	8,082	956	173	34,753
Feb. ..	2,078	11,301	1,169	2,208	2,338	6,040	714	130	25,978
March ..	2,130	11,585	1,198	2,264	2,398	6,192	733	133	26,633
April ..	2,031	11,044	1,143	2,158	2,285	5,903	698	127	25,389
May ..	2,614	14,217	1,471	2,778	2,942	7,599	899	163	32,683
June ..	2,133	11,598	1,200	2,266	2,399	6,199	733	133	26,661
July ..	2,630	14,303	1,479	2,795	2,959	7,644	904	164	32,878
August ..	1,587	8,629	892	1,686	1,785	4,611	545	99	19,834
Sept. ..	2,022	10,988	1,137	2,147	2,273	5,873	695	126	25,260
Oct. ..	2,640	14,355	1,484	2,805	2,970	7,672	908	165	32,999
Nov. ..	2,274	12,363	1,279	2,416	2,558	6,609	781	142	28,422
Dec. ..	2,193	11,926	1,234	2,330	2,468	6,374	754	138	27,417
Totals ..	27,112	147,426	15,248	28,809	30,501	78,798	9,320	1,693	338,907

There has been little increase in the number of hours worked by the home helps as the helpers employed still number 270 (all female). The number has varied during the year but the types of cases helped show little change.

Maternity Cases.—Many patients are now discharged after a stay of only 48 hours in hospital. It is imperative that the allotted home help is there to receive the mother and baby. Maternity cases are welcomed by home helps as there is always a cheerful atmosphere in the home. During the year under review 456 maternity cases were helped, 27,112 hours being given.

Emergency Cases.—28,809 hours were given to emergency cases. The word “emergency” covers many types of cases, e.g. falls of elderly people in the home, burns, scalds, broken and sprained limbs, motor accidents, sudden attacks of mumps, measles, etc. Such cases cause a crisis in the home and the need for a home help.

Problem Families and Mentally Disturbed Patients.—These cases are increasing. It is difficult to keep the same home help on these cases as they are apt to be depressing. The continued fight against indifference, suspicion, querulousness and resentment is wearing and although it is better for the patient to keep the same home help, a change is often necessary from the helper's point of view. Although these cases have no special column of hours allocated, many have received help; home helps are to be congratulated for their forbearance, sympathy, tolerance and hard work in these depressing and pathetic homes.

Chronic Sick, Aged and Infirm.—People between 65 and 98 years of age received 90 per cent. of the hours given by the home helps. The majority of the blind people are elderly and, with a number of emergency cases, hospital discharges and chronic sick falling into this category, the number increases. Every effort is made to encourage the family to give help and to take the responsibility of the cleaning of the home and the personal cleanliness of the aged parent or relative. Home helps have cleaned many of the new flats for elderly people who, owing to slum clearance, have needed rehousing and are unable to give the initial cleaning and rehangings of curtains, etc. necessary in the new home. Many appeals have been made for the continuance of the same home help when rehousing has moved the patient to another part of the city. This is usually done for some time until the person, or couple, readjust themselves to the new surroundings and later a home help who lives in the vicinity is provided. It is appreciated that a change of surroundings can make difficulties for the aged and that a familiar face and helper can be of inestimable value in helping resettlement.

Though many of the aged become difficult to accommodate when deciding the hours to be given and days available, the majority of the cases receiving help are extremely grateful. The help given and, what is more important, the little surprise remembering of the almost forgotten birthday and the willingness of the home help to give the little more than is expected or required of her, is much appreciated. The pathetic shame of the occupant of a once cared for home that has become neglected and grubby, again turns to pride when the home shines and the occupant once more takes a personal pride in her own person. The work of a home help can be arduous, exacting and tiring but these cases make it rewarding.

SECTION 51

MENTAL HEALTH SERVICES

BY

J. M. McALPIN, M.B., Ch.B.,

Medical Officer of the Mental Health Services

AND

J. SQUIRE HOYLE, M.B.E.,

Executive Officer

ADMINISTRATION

The service is administered by a Mental Health Sub-Committee consisting of twelve elected representatives and three co-opted members having experience of the work. Meetings are held monthly.

The approved establishment of the Department is shown in Table I of the Appendix.

The Department provides the following community services for the mentally disordered in the city:—

1. **Mental Deficiency** (*Ascertainment; community care and training; sheltered employment and vocational guidance*).—The occupation centres and sheltered workshops are described in subsequent paragraphs. The Department is indebted to the School Medical Service for much valuable assistance and to the Regional Hospital Board's consultants in mental deficiency for assistance with diagnostic problems and for their readiness to accept suitable cases for institutional care when their waiting lists permit. The Department is also indebted to the Ministry of Labour for the services of the Disablement Resettlement Officers in placing suitable cases in employment. Three mental health workers devote the greater part of their time to the community care of the mentally defective.

2. Work under the Lunacy and Mental Treatment Acts (*Removal of acute cases to hospital under Section 20 of the Act ; after-care of patients discharged from mental hospitals ; preventive services*).—Three mental health workers are employed mainly as duly authorised officers with part-time assistance from a fourth. After-care and preventive work is carried out by the psychiatric social worker assisted by three mental health workers who combine this work with secondment to the Psychiatric Unit at St. James's Hospital, thus affording a valuable link with the hospital services.

No duties are delegated to voluntary organisations but the Sub-Committee is represented on the National Association for Mental Health and Leeds Marriage Guidance Council, to whom grants are paid. The Department enjoys the co-operation of the Regional Hospital Board and the Corporation's Health, Welfare and Educational Services and is thus integrated into the general medical and welfare services of the city.

3. Training and Education.—There has been no change in the Department's policy of training staff within the Department. Places were made available at the occupation centres for students of the National Association for Mental Health course for teachers of the mentally handicapped. Social science students from Leeds University were attached to the Department for practical work. The usual lectures were given to student health visitors, home nurses and first-year social science students. A welcome innovation has been the visits to the occupation centres arranged for medical students doing their pædiatric course.

Educative work included talks to the Leeds Practical Psychology Club, teachers' associations, church and womens' organisations, etc. The film "Towards a Happier Life," completed last year, is in constant use and has been shown in this country and abroad.

WORK UNDERTAKEN IN THE COMMUNITY

Prevention, Care and After-Care (*Mr. V. J. G. Bosworth*).—There has been but little loss of working time through sickness during the year. In addition, there have been no changes of staff except the arrival of a mental health worker in February to fill a vacancy which occurred in 1958. Two mental health workers who had been occupied full-time with mental defectives took over part-time after-care duties during the year. In spite of a better

staff position than in previous years there has been no alleviation in pressure of work on the Section. This is, no doubt, due in part to the renewed emphasis on community care of the mentally ill and since this emphasis is likely to become more marked during 1960 it is hoped that it will be possible to bring the staff to full establishment.

Patients are seen at the Psychiatric Unit, on the wards or referred by the psychiatrist for reports on home situations, history, background, etc. When this is the only contact and there is no after-care, then these cases are classed as "hospital cases" (1958-278; 1959-308). If former in-patients or out-patients are referred for the continued supervision or support of the social worker then they are "after-care cases" and it is noticeable that there has been a marked increase in the number of these cases during the year.

The increase in volume of the work is apparent when it is seen, firstly, that the total figure for visits and interviews this year is 5,421 as compared with 3,937 in 1958 (3,876 in 1957) and, secondly, that the total number of cases interviewed during 1959 is 1,011 compared with 836 in 1958 (817 in 1957). The ratio of men to women is approximately 2 to 3 over the year. Of the 1,011 cases that have come to the section's attention, 569 were new cases not previously referred. This predominance of new cases reflects the Department's interest in "pre-care," i.e. the prevention of mental illness and, in addition, the readiness of the public to come forward voluntarily for treatment. Yet though there would appear to be a lessening of "stigma" in this direction, there is still a problem of resettling in work the patient who has recovered from a mental illness. The mention of mental illness can be sufficient to prejudice his chances in obtaining work for which he applies. There is also the further problem of people whose abilities have been slightly impaired. Such a person may be unable to cope with continued daily work and only manage a few hours a day until he gradually resettles to a full working routine, if at all. The Department is grateful for the co-operation of the Ministry of Labour in sending to the Industrial Rehabilitation Unit candidates for resettlement but there are other patients who find even the environment of the I.R.U. too great a challenge. The question of whether industry

can take persons slightly disabled through mental illness is one which needs further consideration. However, the Department is grateful to those firms who have co-operated in employing men and women who have been mentally ill.

Of the new cases, 322 were referred to our notice through the Psychiatric Out-Patients Clinic at St. James's Hospital. Three mental health workers continue to attend the Unit part-time, each on three occasions during the week. Happy co-operation is maintained with the Almoner's Department at the hospital. After patients are discharged from mental hospitals, the Department asks them if they wish to keep in touch with a social worker. It is explained that such contact is expressly at the patient's own wish and no obligation is involved. During the year 114 new patients were approached in this way. Of the remaining cases 28 were referred directly by general practitioners, 25 by patients themselves or their relatives or friends, and 70 by about twenty other agencies. Among these agencies are the N.S.P.C.C., the National Assistance Board, the Probation Office, Almoners' Departments of hospitals, health visitors, Welfare Services and the Armed Forces. The fact that all these agencies refer cases indicates a greater readiness on the part of the individual to accept psychiatric help. The Department attempts, wherever possible, to get the referring agency to secure the individual's consent to the referral, and tries to obviate the occasion when the worker is called in without the individual's knowledge.

The Therapeutic Social Club (for people who do not find it possible to make easy relationships with others) continues to meet in the homely premises in Hanover Square made available by the Welfare Services Committee. On Mondays and Thursdays of each week (public holidays excepted) members gather there. The club has a committee of members which organises club activities and committee members themselves are largely responsible for directing the programme. Extra activities organised by members included two coach trips to Bridlington and the Morecambe Illuminations respectively, a treasure hunt on foot round the streets of the city centre and two rambles, one from Otley to the Washburn Valley and the other along the Meanwood Beck to Adel. All these, except

the coach outings, were new ventures for the club. The year ended with the usual Christmas Party. The club has 64 members, 39 of whom attend regularly. The age range is from 16 to 40 plus and the average attendance is 23 on a Monday and 15 on a Thursday.

The psychiatric social worker continues to visit one of the Maternity and Child Welfare Clinics and to discuss there with the health visitors problems relating to mental health. Also the staff of the section continue to hold case conferences with the caseworkers of the Leeds Council of Social Service. During the year the Department took part in a pre-release course at Leeds Prison and, together with workers from the Marriage Guidance Council and Leeds Council of Social Service, was responsible for the arrangement of one evening of the week's courses. The Department has also co-operated with the Department of Social Studies, University of Leeds, in providing practical work for students.

Finally, we wish to thank the Rosemary Fellowship, a group of voluntary workers who provide amenities and organise social occasions for patients at the Psychiatric Unit; they have, in addition, been most generous with gifts of food and coal at Christmas for needy patients. A number of their members have agreed to co-operate with the Department in visiting the lonely and friendless.

Lunacy and Mental Treatment Acts, 1890-1930 (*Mr. T. S. Hawkesworth*).—In October, 1959, the first commencement order under the Mental Health Act, 1959, made it possible for patients suffering from mental illness to be admitted to mental hospitals on an informal basis. Full use has been made of this provision in suitable cases.

The mental hospitals have, wherever possible, transferred patients from the certified and voluntary classes to informal; since October we have been notified of 420 patients so transferred. It is interesting to note that as far as can be ascertained, only 620 Leeds patients in the mental hospitals are now on certificate, the remainder being voluntary or informal.

Cases referred to the Department show little change from 1958 but 47 fewer patients were admitted under Section 20 orders, the figures being 362 as against 409. Shortage of accommodation at St. James's Hospital necessitated 33 patients being admitted to

Stanley Royd under Section 20 orders when beds were not available in Leeds. These cases often arose at weekends and during the night.

Admissions to mental hospitals on reception orders again show a decrease, the total admissions being 123 as against 143 in 1958, and of this total 42 were direct admissions from their own homes.

During the year difficulties have again been encountered in obtaining beds for Section 20 cases but there is now better co-operation with regard to this and we are endeavouring to assist in every possible way.

Mental Deficiency Acts, 1913-1938 (*Mr. R. Perry*).—Statistical information is contained in Tables IV, V, and VI of the Appendix. The total on the register represents 3·2 per thousand of the city's estimated population. The number of cases reported during the year—62 males and 44 females—shows an increase on the previous year (46 males and 35 females). This is accounted for by an increase in the number of cases referred by the Education Authority.

The duty of supervising the mentally handicapped children and adults living in the community has continued to be carried out by the Committee's mental health workers. This is regarded as an important part of the service as effective supervision, coupled with attendance at an occupation or industry centre, aims at keeping the patient within the community as envisaged under the new Mental Health Act. The mental health workers also assist in many cases in placing patients in suitable employment and close co-operation is maintained with the officials of the Labour Exchange and the Youth Employment Bureau and also with personnel officers of various factories, mills and stores in the city.

The number of patients in attendance at occupation centres is shown in Table VI of the Appendix.

During the year the Committee's short-stay home has again proved useful in providing temporary accommodation for 76 children during periods of domestic crisis in the home or to enable parents to have a much needed holiday.

The Committee's new film, "Towards a Happier Life," has been in great demand by other local authorities and parents' associations and has been used by universities and hospitals for training purposes. It was also shown to delegates attending the

International Congress of World Federation of Mental Health held in Barcelona. Since it was first released in April, 1959, 48 bookings have been made during the year and applications for hire are received almost daily.

It has been the practice to send a number of patients on holiday each year, usually to Y.M.C.A. camps, but this year a new experiment was tried. Arrangements were made with the proprietor of a small boarding establishment at Scarborough and 14 male patients spent a week's holiday under the supervision of a welfare officer. Thanks to the kindly understanding of the proprietress and her staff, all the patients had an excellent holiday in comfortable surroundings.

A number of male patients have continued to reside in private accommodation at various addresses in the city, and at the end of the year, 22 youths and men were living in this type of accommodation. Most of them are unable to handle their own financial affairs and a mental health worker visits the premises each week to assist them in the payment of board, pocket money and other expenses, any balance being placed in a savings account for the benefit of each patient.

We are grateful to the three ladies who provide this accommodation as, apart from the business side, they take a very deep interest in the welfare and comfort of the men in their care.

The practice has been continued of removing from the supervision register mentally handicapped adults who have proved, by their conduct and work record, that they are capable of living in the community without such supervision, although it has been explained to them and their relatives that the service is always available to them in times of difficulty. During the year 36 males and 35 females have been removed from the register.

Medical Care of Children in the Occupation Centres.—(*Dr. I. M. Holoran*).—Leeds children who attend occupation centres have a routine medical inspection every two years. Parents are invited to be present at the centre to consult with the School Health Service doctor on these occasions. When any physical defect is found the children are seen at least once in the interval between these examinations.

In addition to the above arrangements, the School Health Service (through its orthopædic team) is responsible for advice as to the management of the 42 cerebral palsied children who attend the centres. Any other physically handicapped children who attend are also included in this service. Dr. Holoran visits both centres every six months and recently it has been necessary to arrange one additional visit to the West Leeds centre where most of the heavily handicapped cerebral palsied children are concentrated. Dr. Lewis, the pædiatric member of the team, often accompanies Dr. Holoran. The advice of Mr. Clark, F.R.C.S., Orthopædic Consultant, is available at the School Medical Consultant Clinic when this seems desirable.

Thirty-three cerebral palsied children attend the Stanningley centre, where a full-time remedial gymnast is now working. Nine less severely handicapped children still attend the centre at East Leeds. Physiotherapy for the latter, if advised, is available at the neighbouring school clinic.

By taking the medical services to the centres, liaison between all those responsible for the children's management is facilitated. Staff can explain their views as to the child's difficulties and progress, while the doctor can give direct advice as to management. Furniture and appliances can be reviewed on the spot and the therapists and the doctor can discuss each child's remedial programme as the child is seen. Team work is the keystone required if the best results are to be obtained for these dually handicapped children.

INDUSTRY AND OCCUPATION CENTRES

Stanningley Occupation Centre (*Miss I. Bye*).—During the year we have had 30 new admissions, 11 girls and 19 boys; 14 of these children were transferred from the East Leeds Occupation Centre to relieve overcrowding. One child left the centre to attend an ordinary school, one child was transferred to the East Leeds centre on removal from the district, two of the older girls were transferred to Armley Grange centre and two boys to North Leeds centre. Five West Riding children were transferred to a new centre within their own area. The number of children on the roll at 31st December, 1959, was 100 which includes 11 children from the West Riding area.

The attendance and health of the children remains good and many have taken advantage of the arrangements for poliomyelitis vaccination. Mr. Lewis, part-time physiotherapist, resigned to take up a full-time post at Potternewton School and Mr. Hunt, remedial gymnast (part-time), was appointed to succeed him. The demand for physiotherapy is increasing and much beneficial work is being done. We are grateful to Dr. Holoran and the school spastic team for much help, guidance and encouragement throughout the year. The majority of the children attending the centre are of low intelligence and the greatest emphasis in the work has been on care and training.

The centre continues to be used by the National Association for Mental Health for training their students; we have had visits from students from the teachers' training college, health visitors, nursery nurses and deputations from several local authorities.

The Parents' Association has had numerous activities throughout the year and we are grateful to them for gifts of playground equipment, including swings and a slide for the younger children. They have also taken films of the garden party and of the childrens' activities generally; these were shown at the children's Christmas Party and were much appreciated.

Our thanks are also due to the "Yorkshire Evening Post" for the generous gift of toys for the children as a result of the Christmas Appeal.

East Leeds Occupation Centre and Nowell House (*Mrs. M. S. Tingle*).—New admissions during the year were as follows:—18 boys and 9 girls. Three boys were transferred to North Leeds Occupation Centre and five girls to the Armley Grange Occupation Centre. Fourteen children were transferred to Stanningley Occupation Centre to relieve overcrowding. The number of children on the roll at 31st December, 1959, was 111.

The children admitted to the centre during the year have mostly been young children of low intelligence; in consequence the emphasis has been on care and social training and the more specialised forms of training such as physical exercises, hand work, music and art must be postponed until later years. In dealing with children of this age and degree of intelligence the services of the general helpers are most valuable. Since the majority of the spastic children attend

Stanningley Centre, the services of the physiotherapist are no longer required and the few children attending the centre who need physiotherapy receive treatment at the neighbouring school clinic.

Nowell House Short-Stay Home continues to be run in conjunction with the occupation centre and is staffed by members of the centre staff on a rota basis. During the year 45 boys and 31 girls have been cared for in the home ; of these, 8 were from other authorities in the North of England. There has been little change in the method of running the home which has proved satisfactory for a number of years and which permits continuity of care between the occupation centre and the hostel.

During the year students from the National Association for Mental Health attended the centre for training and instructional visits were paid by student health visitors, students from the teachers' training college and medical students from the University. The work of the centre and short-stay home continues to arouse much interest and deputations from other authorities visited on several occasions throughout the year.

The Parents' Association maintained their interest in the centre throughout the year. We are very grateful to them for their gift of a shed for storage of playground equipment and also for the seaside outing arranged for the children and gifts at Christmas and Easter.

It is with deep regret that we record the death of Mrs. A. M. Taylor, Supervisor of the Centre, on 26th December, 1959. Mrs. Taylor was in charge of the centre from 1st August, 1941, and, in addition to her great personal qualities, brought to the task a wealth of experience in the teaching of normal and educationally sub-normal children.

Armley Grange Occupation Centre (*Mrs. K. Taylor*).—The number of girls and women attending the centre at the end of the year was 50. Four new patients were admitted during the year and one was transferred to the Pioneer Laundry. The average attendance during the year was 92 per cent. During the year the girls attained a high standard of handcraft and domestic work, four of the girls earning awards at the International Handcraft Competition which was held in London in September. The centre is never without orders for the articles the girls produce in the handcraft classes.

Full advantage was taken of the exceptional summer and many hours were spent in outdoor activities in the garden and grounds and in walks in the local park. An interesting and enjoyable day was spent at the Zoological Gardens, Belle Vue, Manchester, and the annual outing to Whitby was much enjoyed. A very successful garden party was held in July.

We are grateful to the Parents' Association for the Christmas Party which they provided for the girls on 9th December, complete with Father Christmas and gifts for everyone. The annual open night and concert was held on 16th December and was well attended by parents and friends.

The staff have attended various lectures connected with work at the centre and also a full course of country dancing. The Parent-Teacher Association continued to meet throughout the year and held three very enjoyable social evenings.

The work of this centre continues to arouse a great deal of interest and several deputations from other authorities were received during the year.

SHELTERED WORKSHOPS

Rutland Lodge Sheltered Workshop and Occupation Centre (*Mr. J. D. Hall*).—Ten youths were employed in the fettling and finishing workshop throughout the year. The total number of components handled during the year was 424,500 to a value of £3,778, an increase of 40 per cent. on last year's figure. This is a most encouraging result and we hope that this output will be maintained or increased during the coming year.

The hourly rates of pay of the operatives now vary from 2s. 3d. for one youth under 18 years of age to 3/- for the two most capable youths, giving an average rate of 2s. 7½d. per hour.

We are sorry to record the sudden death, on 7th September last, of Mr. J. M. Wilson, Works Manager of the parent firm. We are indebted to him for the commencement of this work in September, 1955, and his sympathy for and personal interest in our aims.

One member of the firm's technical staff visits us regularly each week and both he and the new Works Manager have both expressed their satisfaction with the quality of our work.

We continue to produce concrete blocks of various types for Leeds Parks, Allotments and Cemeteries Department, and in the year under review we sold them 1,100 sets of slabs to a value of £590. The Parks Director is fully satisfied with the quality of our work and has assured us of a continuing demand for these blocks. To facilitate the organising of this output, the services of a handyman were obtained at the beginning of May and this man has worked with the four youths engaged in this section, acting under the supervision of the foreman of the workshops. During the year we have managed to raise the weekly pocket money allowances of three of the four youths to 15s., the fourth having started early in October at a rate of 10s.

Occupation Centre.—We began the year with 96 Leeds cases under our care plus 18 from the West Riding. During the year 18 new Leeds cases were admitted, 3 former cases were re-admitted and 20 withdrawn; of these latter 7 commenced work in the open labour market, 4 were admitted to institutions and 5 were discharged to remain at home. Four men obtained work for short periods during the year, returning to us afterwards. One man died after a short illness and one was transferred from this section to the sheltered workshops and is working there satisfactorily. Two new West Riding cases were admitted in the year and one left to start work, leaving 19 West Riding patients attending at the year end together with 98 cases from Leeds.

The "transitional class" for boys up to 15 years of age continues to provide a successful means of helping these boys to prepare themselves for the adult work of the craft rooms.

In the craft rooms all the former types of work continue including the repair of toys for our own centres and for the Leeds day nurseries. During the year four boys had their work entered for the British "Do it Yourself" Handicrafts Exhibition at Olympia, London. These articles were displayed at the Exhibition and all four youths received the Organiser's Certificate of Merit for their work.

The two new craft rooms came into full use in December. These large modern buildings now comprise the occupation centre and house all craft work. The main building is in course of alteration into a residential hostel and a new kitchen and dining room are under construction.

Sporting activities have been carried on throughout the year, with cricket matches between two teams of our own boys in the summer and regular games of football at other times.

The annual excursion to Filey on 18th June was most successful. The weather was kind and the boys all enjoyed themselves on the sands.

It is pleasing to report that the Rutland Lodge Parents' Association is now well organised and flourishing. Beetle drives, jumble sales, coffee mornings and other functions have been held during the year ; a successful garden party was held on 20th June. On 9th May the Committee of the Association presented a tape recorder and this generous gift was put to considerable use during the summer and also for recording carols for the Christmas Play.

Owing to the building alterations, we had to postpone the open day until January, but our boys and staff performed a Nativity Play on 16th December which was attended and enjoyed by a number of parents and guests. Thanks are due to those members of the staff who worked so hard to make this play a success.

Pioneer Laundry (*Mrs. A. Petty*).—There are now 32 girls and women employed at the Laundry. Since completion of the structural alterations, 9,000 to 10,000 articles are laundered each week. The girls are paid according to their ability up to the standard commercial rates and work a full week of 44 hours. Each girl receives a free meal daily and travelling tokens.

Social activities included a day trip to Scarborough and a visit to the pantomime in January. A number of girls save up for their summer holiday and are taken to the seaside for a week under the supervision of the staff. There has been little sickness to report and during the year the girls attended regularly and maintained a good standard of work.

CONCLUSION

The Department's scheme for the implementation of the provisions of the Mental Health Act, 1959, has been submitted to the Ministry of Health. It makes provision for the development of existing services for community care and the provision of residential hostels. With the exception of the provision of residential hostels, it is largely a question of expanding the existing services in the light of new demands and requirements.

The Department acknowledges with thanks the assistance and co-operation received from the Departments previously mentioned, from the Regional Hospital Board's consultants and the Department of Psychiatry, University of Leeds. Thanks are also due to the Chief Constable of Leeds for help received from the police in the removal of patients to hospital, and to Dr. A. H. Wilson, Medical Superintendent of Meanwood Park Hospital, for continued assistance with the admission of patients to the Region's mental deficiency hospitals.

APPENDIX.

TABLE I.

STAFFING

Mr. R. Perry..	..	<i>Deputy Executive Officer</i>	
Mr. J. Marsh	..	<i>Chief Clerk</i>	
Mr. T. S. Hawkesworth		<i>Senior Authorised Officer</i>	
Mr. V. J. G. Bosworth		<i>Senior Psychiatric Social Worker</i>	
Mrs. U. A. Fletcher		<i>Senior Mental Health Worker</i>	
Miss M. A. Casson ..		<i>Secretarial</i>	

OTHER STAFF

Administrative Staff:—

Clerks and Typists	..	..	..	..	3
Telephonist	..	..	..	..	1

Clinical Staff:—

Psychiatric Social Worker	..	..	..	Post vacant
Mental Health Workers ..	..	..	..	7
Part-time Physiotherapist	..	..	..	1
Part-time Remedial Gymnast	..	..	..	1

Sheltered Workshops and Occupation Centres:—

Supervisors	..	..	..	..	4
First Assistant Supervisors	..	..	..	..	4
Assistant Supervisors	..	..	..	..	17
General helps to above ..	..	..	..	..	13
Handcraft Instructors (male)	..	..	..	..	4
Workshop Foreman	..	..	..	..	1
Laundry Forewoman	..	..	..	..	1
Laundry Staff	..	..	..	..	12
Cooks and Domestics	..	..	..	..	22
Caretakers ..	..	..	..	..	2
Motor Driver	..	..	..	..	2

TABLE II.
NUMBER OF LEEDS CASES IN HOSPITALS.

	Menston			Stanley Royd			Storthes Hall		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
On books 1.1.59 ..	452	448	900	210	452	662	26	46	72
Admitted 1.1.59- 31.12.59 ..	67	93	160	64	90	154	2	3	5
	519	541	1,060	274	542	816	28	49	77
Deaths and discharges ..	84	94	178	67	89	156	..	4	4
Remaining on books 31.12.59	435	447	882	207	453	660	28	45	73

TABLE III.
CASES DEALT WITH BY AUTHORISED OFFICERS

	Males	Females	Total
1. Visits paid	580	1,500	2,080
2. Removed to St. James's Hospital and Stanley Royd, under Section 20 of the Lunacy Act, 1890	131	231	362
3. Certified patients transferred to Menston Hospital	15	27	42
4. Certified patients transferred to Stanley Royd Hospital, Wakefield	5	27	32
5. Certified patients transferred to Storthes Hall Hospital	1	..	1
6. Certified patients transferred to other Mental Hospitals .. .. .	..	6	6
7. Direct admissions to Mental Hospitals (certified)	7	35	42
8. Total Mental Hospital admissions on Summary Reception Orders or Petition	28	95	123
9. Patients admitted to St. James's Hospital under Section 20 and transferred to Voluntary	55	74	129
10. Voluntary and Informal patients admitted to Mental Hospitals	448	482	930
11. Voluntary patients admitted to Mental Hospitals on transfer from St. James's Hospital	17	26	43
12. Total voluntary patients	520	582	1,102
13. Temporary patients admitted to Mental Hospitals .. .. .	..	1	1
14. Total admissions to Mental Hospitals (Total of Items 8, 9, 10, 11 and 13) ..	548	678	1,226

TABLE IV.

PARTICULARS OF LEEDS MENTAL DEFECTIVES ON 1ST JANUARY, 1960.

	Males	Females	Total
(a) Under Statutory Supervision ..	359	249	608
(b) Under Guardianship	6	7	13
(c) In Hospitals	494	420	914
(d) Under Voluntary Supervision ..	67	49	116
Totals	926	725	1,651

TABLE V.

PARTICULARS OF MENTAL DEFECTIVES ASCERTAINED DURING 1959.

	Males	Females	Total
1. Ascertainment.			
(a) Cases reported by Local Education Authority (Section 57, Education Act, 1944) :—			
(i) Ineducable children	17	8	25
(ii) At 15 years—on leaving Special School	19	7	26
(b) Other cases reported during 1959 and ascertained to be "subject to be dealt with"	1	5	6
(c) Other cases reported during 1959 who are not at present "subject to be dealt with" but for whom the Local Health Authority may subsequently become liable	25	24	49
Total number of cases reported during the year	62	44	106
2. Disposal of cases reported during the year.			
(a) Cases ascertained to be "subject to be dealt with" :—			
(i) Placed under Statutory Supervision	34	15	49
(ii) Placed under Guardianship (by Order) .. ..	..	..	..
(iii) Admitted to Institutions (by Order)	3	5	8
(b) Cases not at present "subject to be dealt with" :—			
(i) Placed under Voluntary Supervision	25	24	49
Totals	62	44	106

TABLE VI.
OCCUPATION CENTRES

Centre	Male		Female		Totals
	Under 16	Over 16	Under 16	Over 16	
Occupation Centres					
Stanningley	54	..	46	..	100
East Leeds	74	..	37	..	111
Armley Grange .. ..	..	..	9	41	50
Rutland Lodge	20	97	..	..	117
Sheltered Workshops					
Rutland Lodge .. ..	..	10	..	..	10
Pioneer Laundry .. ..	..	1	..	32	33
	148	108	92	73	421*

*Includes 30 cases from the West Riding County Council.

TABLE VII.
PSYCHIATRIC AFTER-CARE 1959

	Males	Females	Total
1. Hospital cases (in- and out-patients) ..	132	176	308
2. After-care cases	263	440	703
3. Total cases dealt with	395	616	1,011
4. Total new cases referred	233	336	569
5. Total visits and interviews	1,900	3,521	5,421

Housing

HOUSING ACTS, 1936-1959

Repair, Individual Demolition, Clearance and Overcrowding

BY

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Statistical data in this section of the Report has been compiled by Mr. H. P. Gill, Supervisory Inspector, Housing Section.

Number of Houses.—The total number of houses and flats in the city on 31st December, 1959, was 170,979, made up of 53,265 back-to-back houses and 117,714 through houses and flats.

New Houses.—The number of permanent new houses and flats completed during the year was 3,559; of these, 2,035 were built by the Corporation and 1,524 were erected by other bodies and persons. During the year the Local Authority converted 49 houses into 120 flats and 34 houses were converted into 77 self-contained flats by private owners.

Housing Shortage.—The number of applications for houses on the registers at the Housing Department on 31st December, 1959, was 22,812 of which 20,555 were regarded as inadequately housed.

Overcrowding.—There is a small improvement in the degree of overcrowding, the percentage on Corporation Estates having fallen from 0.60 to 0.40.

There are 41,906 occupied dwellings on the municipal estates in the city and the average percentage of overcrowding during the year was 0.40.

166 families that were living in overcrowded privately owned houses have been re-housed; all these families have been accommodated in municipal dwellings.

There have been no applications for licences to permit temporary overcrowding during the year.

The number of certificates of permitted numbers issued during the year was 16.

Housing Repairs and Rents Act, 1954, and Housing Act, 1957.—No houses in Clearance Areas were considered to be of a sufficient standard for them to be retained as providing accommodation of a standard which is adequate for the time being.

HOUSING ACTS, 1936-1957, PART IV.—OVERCROWDING.
January 1st to December 31st, 1959.

	1959
Number of new cases of overcrowding discovered in houses owned by the Corporation	37
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	60
Number of overcrowding cases relieved during the year in course of slum clearance operations	61
A. No. of applications for Municipal dwellings known to be statutorily overcrowded	409
B. No. of Municipal Estate dwellings provided to relieve statutory overcrowding	166

Unfit Houses.—During the year 25,018 dwelling-houses were surveyed and examined and 12,016 nuisances and housing defects were remedied. Houses numbering 3,871 found to be defective in one respect or another under the Public Health Act were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Act, 1957, and found not to be in all respects reasonably fit for human habitation and capable of repair was 306.

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to 76 houses under the Public Health Act at a cost of £253 15s. 6d., this amount being recovered from the owners of the properties concerned.

Demolition of Individual Unfit Houses.—The number of Demolition Orders made was 130 whilst 7 Closing Orders were made on parts of buildings. In the case of 67 houses, the demolition of which was inexpedient because of structural considerations, Closing Orders were made under the terms of Section 17, Proviso to Sub-Section 1 of the Housing Act, 1957. In the case of 15 houses no Demolition Orders were made. 8 of these houses were later included in a Clearance Area. 2 were granted Change of User, 1 the owner promised to demolish and rebuild whilst in the remaining four cases the houses belonged to the Hospital Board who agreed to demolish if the Corporation would rehouse the tenants. In one case of a Demolition Order the owner submitted a list of works to make the house fit

and this was accepted, the works being subsequently satisfactorily done. In the case of 4 houses, Closing Orders were not made as the owner was given Change of User. Four of the houses on which Closing Orders were made were of Architectural Interest—otherwise they would have been the subject of Demolition Orders.

The number of houses demolished was 464. During the year 382 families consisting of 1,064 persons affected by either Demolition or Closing Orders were re-housed by the City Council, while 44 families found their own accommodation ; a further 63 houses were demolished by other Corporation Departments.

Housing (Financial Provisions) Act, 1958—Section 3 (2) (a).—During the year 77 houses owned by the City Council were declared to be unfit for human habitation and the necessary certificate of unfitness was furnished in respect of them ; 18 houses affected by action under this Act were demolished.

Clearance Areas.—It was again found possible to increase the rate of representation of unfit houses ; 85 areas comprising 3,511 houses were officially represented to the City Council. This number of houses was approximately 50 per cent. more than that of the previous year. The number of occupants was 8,331. During the year 2 Public Inquiries were held in respect of the following 21 areas, comprising 1,542 houses. In addition, whilst no Public Inquiry was held in respect of the Clowes Street (Jack Lane) Compulsory Purchase Order and the Benson Street (Sheepscar) (part) Clearance Order, an Inspector from the Ministry of Housing and Local Government visited and inspected these areas, which comprised 68 houses.

No. of houses	Areas	Date of Inquiry
438	Little London (Camp Road) 1, 2, 3, 4, 5, 6, 7..	10.2.59
342	Buslingthorpe Lane (Sheepscar)	7.7.59
265	Dolly Lane (Burmantofts) 1, 2, 3, 4	7.7.59
442	Sayner Lane (Hunslet) 1, 2, 3, 4, 5, 6, 7 ..	7.7.59
55	Brancepeth Place (Armley Road) 1-2 ..	7.7.59

The confirmation by the Ministry of Housing and Local Government has been received for 44 areas, the total number of houses affected being 977 as compared with 13 areas involving 743 houses in the previous year.

The average number of persons per house in all areas represented during the year was 2.37. The number of houses in confirmed Clearance Areas demolished during the year was 978.

During the year 18,243 enquiries about the position of houses in relation to the City Council's Slum Clearance programme were answered. The table below gives a summary of action under the Demolition, Closing and Clearance Sections of the Housing Act, 1957.

	1957	1958	1959
SECTION 17—HOUSING ACT, 1957 :—			
No. of houses represented for demolition	184	546	62
No. of Demolition Orders made	172	460	130
No. of families concerned	176	438	69
No. of persons concerned	503	1,323	178
SECTION 17 (1),—HOUSING ACT, 1957 :—			
No. of dwellings represented for closing	96	137	62
No. of Closing Orders made	106	123	67
No. of families concerned	100	134	73
No. of persons concerned	375	465	261
SECTION 18—HOUSING ACT, 1957 (Parts of Buildings) :—			
No. of dwellings represented for closing	9	9	8
No. of Closing Orders made	7	9	7
No. of families concerned	10	9	10
No. of persons concerned	24	35	29
No. of undertakings accepted from owners ..	52	41	47
No. of houses demolished	72	194	464
No. of houses (Parts of Buildings) closed ..	13	39	7
No. of houses closed	34	82	67
No. of families re-housed by Corporation at 31.12.59 (S.S. 17, 17(1) and 18, H.A., 1957) ..	207	515	302
No. of families awaiting re-housing at 31.12.59 (S.S. 17, 17(1) and 18, H.A., 1957) ..	123	182	68
No. of families who found own accommodation at 31.12.59 (S.S. 17, 17(1) and 18 H.A., 1957) ..	20	32	44
No. of families re-housed at 31.12.59 (S.42, H.A., 1957) ..	1,625	1,050	1,293
No. of families who found own accommodation (S. 42, H.A., 1957) ..	130	85	190
No. of houses referred for opinion but not represented	221	205	197
No. of dwellings represented (S. 17, 17(1) and 18 H.A., 1957) which stood in Slum Areas ..	234	469	55

The following table shows the number of houses examined by the Medical Officer of Health as part of the general survey of the City during the year ended 31st December, 1959, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts.

	1957	1958	1959
Number of new houses erected during the year	3,251	3,665	3,559
(i) By the Local Authority	2,103	2,606	2,035
(ii) By other bodies and persons	1,148	1,059	1,524
<i>1. Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made	23,361	30,948	25,018
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925, and the number of inspections made	2,081	3,874	2,944
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation.. ..	1,411	2,981	2,413
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	375	641	306
<i>2. Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action	1,899	3,563	2,433
<i>3. Action under Statutory Powers during the year.</i>			
<i>A.—Proceedings under Section 9 of the Housing Acts, 1936 and 1957.</i>			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	1	..	..
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners	1	..	..
(b) By Local Authority in default of owners	1	..	..
<i>B.—Proceedings under the Public Health Acts.</i>			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1,297	2,054	1,364
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners	1,052	1,860	1,438
(b) By Local Authority in default of owners	50	29	15
<i>C.—Proceedings under Sections 17 and 18 of the Housing Act, 1957.</i>			
(1) Number of dwelling-houses in respect of which			
(a) Demolition Orders were made	172	460	130
(b) Closing Orders were made :—			
(i) S. 18, H.A., 1957	7	9	7
(ii) S.17(1), H.A., 1957	106	123	67
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	72	194	464

Certificates of Disrepair.—Details of the numbers of applications for Certificates of Disrepair and applications for cancellation of Certificates of Disrepair which have been dealt with since the Rent Act, 1957, came into force on 6th July, 1957, until 31st December, 1959, are given in the following table :—

RENT ACT, 1957.

First Schedule

APPLICATIONS FOR CERTIFICATES OF DISREPAIR	
(1) No. of applications for certificates	1,263
(2) No. of decisions not to issue certificates	29
(3) No. of decisions to issue certificates :—	
(a) in respect of some but not all defects	975
(b) in respect of all defects	231
(4) No. of undertakings given by landlords under Paragraph 5 of the First Schedule	936
(5) No. of undertakings refused by Local Authority under proviso to Paragraph 5 of the First Schedule	4
(6) No. of certificates issued	229
APPLICATIONS FOR CANCELLATION OF CERTIFICATES OF DISREPAIR	
(7) Applications by landlords to Local Authority for cancellation of certificates	159
(8) Objections by tenants to cancellation of certificates	62
(9) Decisions by Local Authority to cancel in spite of tenant's objections	26
(10) Certificates cancelled by Local Authority	117

Improvement Grants.—The Housing Committee has continued the making of grants under the provisions of Section 3 (2) (a) of the Housing (Financial Provisions) Act, 1958, to enable the improvement of sub-standard houses to be carried out by the provision of modern amenities such as bathrooms, internal water closets, food stores, etc.

In addition to grants to owners of individual houses, a further eight areas comprising 854 houses were surveyed and details of the ownership and the suitability of these houses for improvement were reported to the Housing Committee. These eight areas are shown on the following page.

			No. of Houses
East End Park	Area No. 1	..	125
Leeds, 9	Area No. 2	..	73
	Area No. 3	..	94
Sutherland Road,	Area No. 1	..	171
Harehills,	Area No. 2	..	148
Leeds, 9	Area No. 3	..	111
Crosby Road,	Area No. 3	..	78
Holbeck,	Area No. 4	..	54
Leeds, 11			

The owners of these houses have been approached and informed of the facilities available for improving their houses and that, since the Improvement Grant was limited to half the costs of the works (with a maximum of £400) the City Council was prepared to lend that part of the cost to be borne by the owner. Alternatively, it was suggested that the City Council would be prepared to purchase the property and to carry out the improvements.

On the 1st July, 1959, the House Purchase and Housing Act, 1959, came into force. This instituted the payment of Standard Grants. Heretofore, the granting of Improvement Grants had been at the discretion of the Local Authority. This new Act provides that where a house has a minimum "life" of 15 years, a grant shall be paid for half the cost of certain standard amenities, subject to a maximum grant of £155. The standard amenities are :—

- (a) a fixed bath or shower in a bathroom.
- (b) a wash hand basin.
- (c) hot water supply.
- (d) water closet in or contiguous to the dwelling.
- (e) satisfactory facilities for the storing of food.

If the dwelling already has one or more of these amenities the grant will still be payable but the maximum grant will be reduced in respect of each of the amenities which are already provided by certain definite fixed sums. The discretionary grant, which is still available, allows a wider range of improvements with the maximum grant being £400. Since the Act came into force 7 applications for Standard Grants have been approved and the work satisfactorily completed in 2 cases.

The position from the commencement of the scheme is as follows :—

IMPROVEMENT/STANDARD GRANTS

Number of houses in respect of which applications received—Improvement Grant/Standard Grant	2,784
Number of houses in respect of which applications withdrawn—Improvement Grant/Standard Grant	438
Number of houses not suitable for Improvement Grant	517
Number of houses not suitable for Standard Grant..	6
Number of houses in respect of which formal applications for Improvement Grant have been received	911
Number of houses in respect of which formal applications for Standard Grant have been received..	16
Number of formal applications for Improvement Grant approved by the Local Authority ..	829
Number of formal applications for Standard Grant approved by the Local Authority	7
Number of houses improved—Improvement Grants	679
Number of houses improved—Standard Grants ..	2

All applications are dealt with by the staff of the Public Health Department from reception to completion.

The City Council has continued its interest in the conversion into flats and maisonettes of the houses, which are, by present-day standards, too large to be suitable for occupation by most single families and which are, or may become, the subject of a number of lettings without the provision of adequate facilities. It is felt that such houses, where possible, should be properly converted into flats and maisonettes so that each occupier enjoys satisfactory self-contained accommodation.

Further sub-areas of such houses in the Chapeltown Road district, which is now known as the Studley Grange area, have been surveyed and reported to the Housing Committee.

Name of Area				Number of Houses	Number of Families
Studley Grange Area	No. 8	..		57	99
"	"	"	No. 9 ..	47	84
"	"	"	No. 10 ..	46	70
"	"	"	No. 11 ..	48	62

In these cases an approach was made to the owners informing them that the Council would be glad to acquire these houses (if a satisfactory price could be agreed) in order to ensure the proper conversion of the property and accept the responsibility for seeing that the present occupants are rehoused. Those owners not desirous of selling the property to the Council were informed that Improvement Grants and loans are available to meet the cost of conversion of the houses into self-contained flats and maisonettes.

Where owners were not willing either to improve their houses or to sell them to the Corporation to allow such improvement to take place, the Council decided to deal with the balance of such houses by way of Compulsory Purchase Order. The Ministry arranged for a Public Local Inquiry to be held on the 4th June, 1959, in respect of the Louis Street Compulsory Purchase Order, 1959, No. 3, which consisted of 26 through terrace houses, 1 detached house, and one semi-detached house with a lock-up shop.

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Skinner Lane Areas 1 and 2	19.9.49	C.P.O.	27	71	..	29.5.51	27	27
Upper Carr Place Areas 1, 2, 3 and 4	17.7.51	C.P.O.	30	107	..	26.11.52	30	30
Brown's Yard (North Street)	12.5.52	C.P.O.	32	131	..	1.2.54	32	32
Temperance Street (Kirkstall)	8.9.52	C.P.O.	21	62	..	19.5.51	21	21
Burton Street (Dewsbury Road)	20.10.52	C.O.	33	76	..	28.10.53	33	29
Benson Street (Sheepscar)	19.1.53	C.O.	7	13	..	1.8.53	7	7
Franchise Street Areas 1, 2, 3 and 4	15.12.52	C.P.O.	25	79	..	Areas 1, 2 and 4 :— 10.11.53 Area 3 :— 29.10.53	25	25
Low Moor Side (Holbeck) Areas 1 and 2	16.3.53	C.P.O.	30	101	..	18.1.54	30	30
Freehold Street Area	16.3.53	C.P.O.	20	52	..	3.2.54	20	20
Monkton Street (Dewsbury Road) Area	15.6.53	C.P.O.	30	83	14.1.54	8.3.54	30	30
Camp Street Area	15.6.53	C.P.O.	24	76	..	20.1.54	24	24
Saville Green No. 1 Area	13.7.53	C.P.O.	115	349	9.6.54	22.7.54	116	116
Victoria Place (Camp Road) Area	13.7.53	C.P.O.	10	108	6.4.54	9.6.54	10	10
Carr Road (Camp Road) Areas 1, 2 and 3	13.7.53	C.P.O.	16	65	6.4.54	14.5.54	16	16
Sheepscar Street North Area	21.9.53	C.P.O.	14	38	9.6.54	22.7.54	14	12
Pottery Fields Area No. 1	21.9.53	C.P.O.	23	89	..	28.6.54	23	23
Oldfield Lane Areas 1 and 2	16.11.53	C.P.O.	27	84	9.6.54	22.7.54	27	27
Potternewton Lane Areas 1 and 2	16.11.53	C.P.O.	17	36	19.10.54	24.1.55	17	17
Area No. 1	16.11.53	C.P.O.	8	22	9.6.54	22.7.54	8	8
Area No. 2	..	..	..	..	..	..	..	..
Woodhouse Cliff (Smith's Court) Areas 1 and 2	14.12.53	C.P.O.	16	45	..	7.5.56	16	15
Area No. 1	14.12.53	C.P.O.	6	7	..	7.7.54	6	6
Area No. 2	..	..	..	..	..	..	..	..

C.O.—Clearance Order C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Cobourgh Street Areas 1 to 8 :—								
Area No. 1	14.12.53	C.O.	2	6	19.1.55	6.7.55	2	..
Areas Nos. 2, 3 and 4 ..	14.12.53	C.P.O.	36	123	19.1.55	6.7.55	35	35
Area No. 5 (part) ..	14.12.53	C.O.	4		19.1.55	6.7.55	4	4
Area No. 6 (part) ..	14.12.53	C.O.	5		19.1.55	6.7.55	5	5
Area No. 5 (part) ..			5	83				
Area No. 6 (part) ..			2					
Area No. 7	14.12.53	C.P.O.	11		19.1.55	6.7.55	21	20
Area No. 8			3					
Saville Green Areas 2 to 10 ..	18.1.54	C.P.O.	367	1,140	19.1.55	10. 6.55	367	364
Potternewton Lane Area 3 ..	18.1.54	C.P.O.	3	3	19.10.54	24.1.55	3	2
Carlisle Street (Wellington Road) ..	15.2.54	C.P.O.	42	159	19.10.54	24.1.55	42	42
Charing Cross Street and Scott Street (Woodhouse) ..	15.2.54	C.P.O.	204	595	19.10.54	24.1.55	202	201
Pottery Fields Areas 2 to 7 ..	22.3.54	C.P.O.	154	489	26.10.54	25.2.55	154	154
New Inn Street (Tong Road) :—								
Area No. 1	22.3.54	C.P.O.	5	8	..	24.3.55	5	1
Area No. 2	22.3.54	C.P.O.	6	8	..	24.3.55	6	6
Area No. 3	22.3.54	C.P.O.	43	116	1. 3.55	5.5.55	43	43
Area No. 4	22.3.54	C.P.O.	69	186	..	24.3.55	69	68
Whitelock Street (North Street) :—								
Area No. 1	22.3.54	C.P.O.	11	47	26.10.54	10.2.55	10	7
Area No. 2 (part) ..	22.3.54	C.P.O.	31	114	26.10.54	20.5.55	29	21
Area No. 2 (part) ..							2	2
Area No. 3	22.3.54	C.P.O.	16	53	26.10.54	20.5.55	16	16
Area No. 4	22.3.54	C.O.	2	8	26.10.54	16.2.55	2	..
Area No. 4 (part) ..	22.3.54	C.P.O.	39	170	26.10.54	20.5.55	39	36
Upper Wortley Road Areas 1 to 8 ..	21.4.54	C.P.O.	154	435	30.8.55	8.11.56	148	26
do. Area 2 (part) ..		C.O.	1	..	..	8.11.56	1	..
do. Area 4		C.O.	6	..	..	8.11.56	6	..
do. Area 8 (part) ..		C.O.	7	..	..	8.11.56	7	7
do. Area 8 (part) ..		C.O.	3	..	..	8.11.56	3	3

C.O.—Clearance Order C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

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AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Silver Royd Hill Areas 1 and 2 ..	21.4.54	C.P.O.	44	111	1.3.55	16.2.55	44	39
Greenside Road (Lower Wortley) Areas 1 to 4 ..	21.5.54	C.P.O.	62	173	14.6.55	4.8.55	62	62
Green Road (Burmantofts) Areas 1 to 5 ..	16.7.54	C.P.O.	645	1,805	6.10.55	4.2.56	642	608
Town Street (Beeston) Areas 1 to 11 ..	24.9.55	C.P.O.	184	413	25.10.55	20.2.56	185	174
Armley Road Areas 1 and 2 ..	19.10.54	C.P.O.	84	229	8.6.55	3.8.55	84	83
Oakland Row (Meanwood Road) ..	19.11.54	C.P.O.	37	86	..	19.5.55	37	37
Church Street (Hunslet) Areas 1 to 15 ..	19.11.54	C.P.O.	162	440	22.11.55	..	..	135
Cross Lane Farnley Areas 1 to 5 ..	17.12.54	C.P.O.	146	374	17.4.56	19.7.56	144	143
Alfred Place (Camp Road) Areas 1 to 6 ..	17.12.54	C.P.O.	21	92	8.6.55	4.8.55	21	21
Villiers Terrace (Camp Road) Areas 1 to 3 ..	21.1.55	C.P.O.	67	491	23.11.55	16.3.56	65	65
Belinda Street (Hunslet) Areas 1 to 6 ..	18.2.55	C.P.O.	126	391	25.9.56	31.1.57	124	115
Michael Street (Hunslet) ..	18.2.55	C.P.O.	12	28	..	2.11.55	12	12
Minor Street (Kirkstall Road) ..	18.2.55	C.P.O.	14	30	..	4.8.55	14	14
Langham Street (Wellington Road) (part) ..	25.3.55	C.P.O.	} 297	913	19.6.56	8.11.56	287	280
Milnes' Street (Wellington Road) (part) ..	25.3.55	C.O.			..	..	8	8
Areas 1 and 2 ..	25.3.55	C.P.O.	33	88	19.6.56	25.10.56	33	30
Area No. 1 ..	25.3.55	C.O.	10	20	19.6.56	25.10.56	10	10
Area No. 2 ..	25.3.55	C.P.O.	429	1,111	19.6.56	3.10.56	429	419
Beckett Street (Burmantofts) Areas 1 and 2 ..	25.3.55	C.P.O.	443	1,194	6.11.56	29.5.57	438	428
Meynell Street (Holbeck) Areas 1 to 5 ..	20.5.55	C.P.O.	4	26	..	9.3.56	4	4
Northfield Villas (Northfield Terrace) ..	16.6.55	C.P.O.	13	36	..	17.4.56	13	13
Nevin Street (Hunslet Road) ..	14.7.55	C.P.O.	4	17	..	17.4.56	4	4
Ramsden Terrace (North Street) ..	14.7.55	C.P.O.	4	17	..	17.4.56	4	4

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Buslingthorpe Lane (Meanwood) Areas 1 to 7	14.7.55	C.P.O.	179	471	12.12.56	5. 7.57	..	149
West End Terrace (Hyde Park) Areas 1 to 4	14.9.55	C.P.O.	34	56	24.10.56	21. 1.57	..	24
Burley Village (Burley Road) Areas 1 and 2	14.9.55	C.P.O.	56	105	19. 2.57	17. 5.57	..	42
Oatland Houses (Duxbury Street) Meanwood Street (Meanwood Road)	20.10.55	C.P.O.	3	15	..	..	..	..
Areas 1 to 4	20.10.55	C.P.O.	71	207	19. 2.57	17. 5.57	..	63
Bentley Cottages (Meanwood)	17.11.55	C.P.O.	15	46	24.10.56	4. 1.57	15	15
Burton Row (Hunslet) Areas 1 and 2	17.11.55	C.P.O.	40	79	24.10.56	8. 3.57	..	20
Rutland Terrace Areas 1 to 4	17.11.55	C.P.O.	55	173	19.6.56	24.10.56	..	53
Old Belle Isle Cottages (Middleton) Areas 1, 2 and 3	17.11.55	C.P.O.	24	60	..	..	..	24
Louis Street	17.11.55	C.P.O.	2	25	19.6.56	24.10.56	2	2
Newsam Square (Halton)	15.12.55	C.P.O.	27	64	..	31. 7.57	..	27
Sowden Row (Crossgates) Areas 1 and 2	15.12.55	C.P.O.	10	21	24.10.56	31.12.56	10	10
Missess Lane (Armley) Areas 1 and 2	15.12.55	C.P.O.	38	101	24.10.56	12. 3.57	..	34
Strawberry Road (Hall Lane)	15.12.55	C.P.O.	4	10	..	19.10.56	4	4
Byron Street	15.12.55	C.P.O.	7	26	..	31.10.56	7	7
Argyle Road (Burmantofts) Areas 1, 2 and 3	21.6.56	C.P.O.	291	787	18.3.58	7.10.58	288	129
Club Row (Kirkstall)	16.3.57	C.P.O.	30	65	..	19.3.58	30	27
Kirkstall Road (East) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12	15.6.57	C.P.O.	437	1,096	18.3.58	No. 12 :— 22.4.58 Nos. 6 & 7 :—2.6.58 Nos. 1-5 :— 28.11.58 2.4.58	23	277
Stansfield Row Area	15.6.57	C.P.O.	60	839	..	..	320 60	.. 59

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued.

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Albert Grove (Camp Road) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17	17.10.57	C.P.O.	386	1,290	2.12.58	1.7.59	386	32
Lower Wortley Road Areas 1	19.12.57	C.O.	14	35	2.12.58	13.7.59	14	75
2	19.12.57	C.P.O.	24	63	2.12.58	18.4.59	24	
3	19.12.57	C.O.	7	15	2.12.58	13.7.59	7	
4	19.12.57	C.P.O.	5	12	2.12.58	17.7.59	5	
5 (part)	19.12.57	C.P.O.	147	374	2.12.58	17.7.59	147	
5 (part)	19.12.57	C.O.	3	7	2.12.58	13.7.59	3	
6	19.12.57	C.P.O.	8	18	2.12.58	17.7.59	8	
7	19.12.57	C.P.O.	2	4	2.12.58	17.7.59	2	
8	19.12.57	C.O.	7	13	2.12.58	17.7.59	7	
9	19.12.57	C.P.O.	3	7	2.12.58	17.7.59	3	
10	19.12.57	C.O.	3	7	2.12.58	17.7.59	3	83
11	19.12.57	C.P.O.	24	53	2.12.58	17.7.59	24	
12	19.12.57	C.P.O.	26	73	2.12.58	17.7.59	26	
13	19.12.57	C.O.	4	7	2.12.58	17.7.59	4	
Theaker Lane (Armley) Areas 1	15.11.57	C.P.O.	57	150	11.11.58	16.7.59	57	
2	15.11.57	C.P.O.	2	5	11.11.58	22.5.59	2	
3	15.11.57	C.P.O.	92	258	11.11.58	22.5.59	92	
4	15.11.57	C.P.O.	40	124	11.11.58	22.5.59	40	
5	15.11.57	C.P.O.	12	27	11.11.58	22.5.59	12	
6	15.11.57	C.P.O.	2	8	11.11.58	16.7.59	2	
7	15.11.57	C.O.	3	7	11.11.58	13.7.59	3	
8	15.11.57	C.P.O.	35	78	11.11.58	22.5.59	35	
Little London (Camp Road) Areas 1, 2, 3, 4, 5, 6 and 7	20.3.58	C.P.O.	438	1,491	10.2.59	13.10.59	438	42
Buslingthorpe Lane (Sheepscar)	16.6.58	C.P.O.	342	990	7.7.59
Dolly Lane Areas 1, 2, 3, and 4	15.9.58	C.P.O.	265	691	7.7.59	5

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

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AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Sayner Lane Areas 1	15.9.58	C.P.O.	326	888	7.7.59	..	..	8
2	15.9.58	C.P.O.	25	63	7.7.59	4.10.59	25	
3	15.9.58	C.P.O.	61	147	7.7.59	7.8.59	61	
4	15.9.58	C.P.O.	6	14	7.7.59	..	..
5	15.9.58	C.P.O.	4	14	7.7.59	..	..	..
6	15.9.58	C.P.O.	8	24	7.7.59	..	..	..
7	15.9.58	C.P.O.	12	40	7.7.59	..	..	..
Brancepeth Place Areas 1 and 2	15.9.58	C.P.O.	55	157	7.7.59	..	..	..
Moor Crescent Road Areas 1 and 2	18.12.58	C.P.O.	747	1,927	..	..	..	..
Moorville Street (Lady Pitt Lane) Areas 1 and 2	19.2.59	C.P.O.	121	305	..	..	..	..
Hyde Park Road "A" Areas 1, 2, 3, 4	16.3.59	C.P.O.	239	801	..	..	..	..
Balm Road (Hunslet) Areas 1, 2, 3, 4	16.4.59	C.P.O.	159	431	..	..	..	..
New Princess Street (Elland Road) Areas 1, 2, 3	16.4.59	C.P.O.	107	281	..	..	..	..
Clowes Street (Jack Lane) Area	16.4.59	C.P.O.	51	115	..	..	..	..
Dickinson's Yard, Armley, Area	16.4.59	C.O.	3	15	..	..	..	..
Benson Street (Sheepscar) Area No. 2	21.5.59	C.P.O.	74	188	..	..	..	..
Elland Street (Elland Road) Area	21.5.59	C.P.O.	86	176	..	..	..	..
Wortley Road Clearance Areas 1, 2, 3, 4, 5	21.5.59	C.P.O.	81	166	..	..	..	..
Wellington Road Areas 1, 2, 3	18.6.59	C.P.O.	554	1,500	..	..	..	..
Red Lion Yard (Thwaite Gate) Areas 1, 2, 3, 4	16.7.59	C.P.O.	47	113	..	..	..	..
Pitfield Street (Hunslet) Areas 1 and 2	16.7.59	C.P.O.	137	377	..	..	..	..
Great Wilson Street Areas 1, 2, 3	16.7.59	C.P.O.	33	105	..	..	..	..
Park Row (Kirkstall) Areas 1, 2, 3, 4	16.7.59	C.P.O.	165	373	..	..	..	..
Wyther Lane Area	16.7.59	C.P.O.	22	63	..	..	..	..
Beeston Royds Areas 1 and 2	16.7.59	C.P.O.	25	52	..	..	..	..
Leathley Road Areas 1 and 2	17.9.59	C.P.O.	24	64	..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Johnston Street Area	17.9.59	C.P.O.	45	113	..	..	..	..
Upper North Street Area	17.9.59	C.P.O.	125	313	..	..	..	..
Scotland Mill Cottages Areas 1 and 2 ..	17.9.59	C.P.O.	6	14	..	..	..	..
Hanover Street (Park Lane) Areas 1 and 2	17.9.59	C.P.O.	45	158	..	..	..	..
Kendal Terrace (Kendal Lane) Area ..	17.9.59	C.P.O.	75	197	..	..	..	..
Bedford Place (Park Lane) Areas 1, 2, 3, 4	17.9.59	C.P.O.	53	135	..	..	..	..
Park Row (Kirkstall) Area No. 5	15.10.59	C.P.O.	5	12	..	..	..	..
Woodhouse Cliff Areas 1, 2, 3, 4	15.10.59	C.P.O.	60	159	..	..	..	..
Chapel Allerton (Town Street) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 ..	15.10.59	C.P.O.	120	232	..	..	..	..
Byron Street (North Street) Areas 2, 3, 4	15.10.59	C.P.O.	53	50	..	..	..	..
Belgrave Street (Wade Lane) Areas 1 and 2	15.10.59	C.P.O.	23	31	..	..	..	..
Cross Stamford Street (Newtown) Areas 1 and 2	15.10.59	C.P.O.	68	188	..	..	..	..
Melbourne Street (North Street) Area	15.10.59	C.P.O.	32	88	..	..	..	..
Kirkstall Road (West) Areas 1 and 2 ..	19.11.59	C.P.O.	689	1,932	..	..	..	..
Beecroft Street (Kirkstall) Areas 1, 2, 3, 4 and 5	19.11.59	C.P.O.	184	384	..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.



Food Hygiene

FOOD INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

In 1959, 4,670 visits were paid by public health inspectors to premises in which foodstuffs, intended for human consumption, were prepared, stored or sold. 1,669 of these were to premises registered with the Local Authority under the provisions of Section 16 of the Food and Drugs Act, 1955, *i.e.*, to premises used for the sale or manufacture or storage of ice-cream, or the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale. These visits also included a number of inspections of premises occupied by outworkers and used for the peeling of onions.

3,001 other visits were to places not registered under the Food and Drugs Act, *i.e.*, places such as bakehouses, restaurants, cafes, canteens, butchers' shops, provision merchants, etc. All food premises, whether or not they are registered, must comply with the Food Hygiene Regulations, 1955, and a considerable amount of work has been done under these Regulations during the year. In fact, some 392 warning letters have been issued to point out contraventions of the Regulations or to require alterations to premises to bring them into line with modern standards. These letters and other action taken by public health inspectors have resulted in a large number of improvements to food premises of all types. Details of this work are contained in the table of work done by public health inspectors printed on page 209.

Restaurants and Cafes.—The inspection of restaurant, cafe and snack bars in the city has, of necessity, been considerably reduced in the year; 611 visits have been paid compared with 1,030 in 1958. This is unfortunate but was due to one member of the staff resigning on the grounds of ill-health.

During the year it was found necessary to institute legal proceedings against the occupier of one restaurant because of the very unsatisfactory conditions of the kitchen, food store room and

preparation room. The occupier had been warned on many occasions regarding the conditions but had ignored the requests to improve the conditions. The Stipendiary Magistrate imposed a fine of £50 and, as a result of the case, the restaurant has not re-opened.

Towards the end of the year several " Hot Dog " stalls appeared on the streets in the city, sales being confined to late night and early morning on Friday, Saturday and Sundays. It was noticed that the stalls were very unsatisfactory and the operators were in a filthy condition. Observations were taken over an extended period which involved a good deal of night inspections and it was found that the stalls were being stored in a broken-down, dilapidated and insanitary building (see photograph on opposite page).

From further investigations it was also found that the owner of the business lived in a nearby city and that he had been operating at various towns and cities in the North. As a result of the investigations legal proceedings were instituted against the owner for varying offences against the Food Hygiene Regulations, 1955 (see Legal Proceedings, page 157). Photographic evidence was produced and the illustration shown in the Report reveals some of the conditions found.

The public health inspectors who visit factories and workplaces inspect also, as a matter of routine, the canteens and messrooms provided in these places. These again must conform to the provisions of the Food Hygiene Regulations if food is prepared for sale.

Under the provisions of the Food Hygiene Regulations, 1955, 122 deficiencies were dealt with which related to the following:—

Unsuitable or insufficient sanitary conveniences for use of staff of food premises	4
Lack of constant supply of hot and cold water or of hot water at a suitably controlled temperature to sinks or wash hand basins	6
Provision of washing facilities for persons handling food	5
Unsuitable and insufficient first-aid equipment . .	10

(Continued)

Inadequate provision for suitable storage of outdoor clothing of persons engaged in the handling of food	4
Unsuitable and insufficient facilities for washing food and equipment—sinks, etc.	9
Insufficient and unsuitable means of ventilation to foodrooms	12
Defective or unsatisfactory walls, floors, ceilings, etc., of foodrooms	20
Dirty condition of walls, floors, ceilings, etc., of foodrooms	10
Inadequate food storage	2
Other defects found	40

Conditions in industrial canteens have continued to improve. Certain structural alterations have been made and new equipment has been provided, and the standard of hygiene continues to be comparable with those in commercial kitchens where food is prepared for sale to the general public.

Ice-Cream Premises.—During the year 759 visits were made to the premises in the city which are used for the manufacture and sale of ice-cream.

Fish-Frying Premises.—The number of visits paid to registered fish-frying premises was 590. Three applications for registration were approved during the year, subject in one case to the carrying out of works of alteration to the premises.

Other Registered Food-Preparing Premises.—During the year 320 visits were made to other registered food-preparing premises such as those used for the manufacture of sausage, or preparation of pork products, meat pies, jams, pickles and sauces. Eight applications for registration of premises used for one or other of those purposes were granted subject in two cases to the carrying out of works of alteration to the premises.

Statistics with regard to the registration of premises under Section 16 of the Food and Drugs Act, 1955, are set out in the following table.

REGISTRATION

Number of premises registered for the manufacture of ice-cream during 1959	1
Number of premises registered for storage of ice-cream during 1959	1
Number of premises registered for the sale of ice-cream during 1959	166
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale (3 fried fish shops, 8 manufacturers of sausages, potted meat, meat pies, etc.)	11
Number of notifications of change of occupier received :— ice-cream premises	39
food-preparing premises	26
Number of premises removed from register :— Ice-cream premises (manufacture)	9
Ice-cream premises (storage)	1
Ice-cream premises (sale)	17
Food preparing premises	9
Number of premises on the register 31st December, 1959 :— (a) used for manufacture of ice-cream	43
(b) used for the sale of ice-cream	1,735
(c) used for the storage of ice-cream intended for sale	8
(d) used for the manufacture of sausages, or preparation of preserved food	774

Transport and Handling of Meat.—The condition of the vehicles used for the transportation of meat has improved and is now reasonably satisfactory.

Transport of Fish.—The continued use of non-returnable boxes has made a great improvement in the hygienic condition of fish boxes.

Legal Proceedings—Food Hygiene Regulations, 1955.—A butcher was prosecuted for transporting meat which was insufficiently covered, the meat being carried on a trolley through Kirkgate Market. The defendant was given an absolute discharge and was ordered to pay 4s. costs.

The proprietor of a cafe was prosecuted under four Sections of the above Regulations, namely, Sections 5, 6 (1)(b), 19(1)(b) and 23 in respect of dirty conditions and lack of washing facilities. The defendant was found guilty and was fined a total of £50.

The owner of three pedal-propelled vehicles used for the sale of " Hot Dogs " in the city at night was prosecuted under Sections 5 and 26 (1) of the above mentioned Regulations in respect of the unsatisfactory and dirty state of the vehicles. The defendant was found guilty on six counts and was fined £50 with an alternative of 84 days imprisonment under Section 26 (1) in respect of each vehicle ; £20 in respect of two vehicles and £10 in respect of the third with an alternative of two months imprisonment under Section 5, making a total of £200 in fines.

The owner of a grocer's shop was prosecuted under the provisions of the Food Hygiene Regulations, 1955, in respect of the dirty condition of his premises, lack of washing facilities and exposure of food to risk of contamination. The defendant was found guilty and fined £10.

The owner of a butcher's shop was prosecuted for smoking in a food room and was fined £5. Later in the year the defendant was again prosecuted for a similar offence and a fine of £25 was imposed.

The owner of a butcher's shop was prosecuted for smoking in a food room. The defendant was found guilty and fined £5.

The owner of a wet fish and poultry shop was prosecuted for smoking in a food room and a fine of £10 was imposed in this case.

Food Sampling.—Supervisory Inspector H. Long reports that the inspectors in the Food and Dairies Section took 697 samples of food and drugs, made up of 223 formal and 474 informal samples. A large variety of food has been sampled and the City Analyst has reported that, with few exceptions, they have been found satisfactory.

Administrative action was taken in all cases where the samples were found to be adulterated or deficient. Minor cases of adulteration or deficiency were dealt with by a letter to the firm or persons responsible. Serious cases were dealt with by prosecution and the results of the summonses issued under the Food and Drugs Act, 1955, during the year are shown in the table on page 169.



INSANITARY "HOT DOG" VEHICLES IN UNSATISFACTORY STORE

Photograph shows the inside of the store where the vehicles were kept. It also illustrates the vehicle provided with a canopy cover. On the right can be seen wire spring mattresses and accumulation of flocks and one of the empty tins in which the sausages are supplied. It will be noticed that the walls are bare brickwork, the ceiling is in a dilapidated condition and that the rolled steel joist supporting a party wall is rusted. The floor is in part concrete, in part flagging and in part earth.



From the statistical tables relating to food and drugs sampling it will be noticed that there has been a very great increase in the number of informal samples taken compared with any previous year. This change is not due to any different opinion regarding the formal sampling procedure, but is one that has been forced upon the Department due to the staffing difficulties which have been experienced. The inability to concentrate on formal sampling was reflected in the fact that it was not possible to obtain formal samples in two instances where proceedings might have been instituted.

Of the various legal proceedings which have been instituted for offences against the Food and Drugs Act, 1955, special mention is made of the three following commodities.

1. *Pork sausages*.—During the year three cases have been heard before the Leeds City Courts relating to deficiencies of meat content and in each case a conviction was obtained. The cases illustrate the wide variation of the meat content found in sausages since the rescinding of the relevant Food Standards Order.

2. *Pure Grape Brandy*.—This investigation followed a request that brandy be sampled. A consignment of brandy in bottles had been received by a wine and spirit merchant. An unopened and sealed bottle was taken and a formal sample obtained. On analysis it was found that the brandy was 63 per cent. proof spirit. The sample was therefore 10 per cent. deficient in proof spirit. On investigation it was found that the brandy was imported in bulk and this particular consignment was one cask containing 58/59 gallons Pure Grape Brandy 24·8 under proof. The distilled water was added on the premises to produce a 70 per cent. proof spirit. Further enquiries showed that the fob purchased from France did, in fact, contain only 57 gallons. The amount of water added had been calculated on the higher figure and in mitigation this was put forward as being the cause of the 10 per cent. deficiency in proof spirit.

3. *Tinned Chicken*.—This case was first brought to the attention of the Department by a member of the public who had purchased a tin of chicken and was dissatisfied with the contents. A formal

sample of the particular brand was obtained and submitted to the City Analyst for examination. The contents of the tin consisted of 42 per cent. chicken, 2 per cent. added gelatine and 56 per cent. added water. The article was described on the tin as "Whole Roast Chicken in Natural Juices, Gelatine added." The total weight of the contents of the tin amounted to 48 ounces of which the chicken—including the natural juices—weighed 20 ounces. It was considered that the wording of the label was misleading as to the substance of the contents of the tin.

Proceedings were instituted and the case was heard at the Leeds City Courts when the defendant company pleaded guilty. Following the hearing of this case the label was amended in such a manner as to comply with the provisions of the Food and Drugs Act, 1955.

Ice-Cream Sampling.—During the year 47 samples of ice-cream were taken for bacteriological examination from the place of manufacture and local vendors. Of this number 7 samples were classified as unsatisfactory and 8 very unsatisfactory. All the laboratory results were communicated to the ice-cream manufacturers and vendors. When the result showed an unsatisfactory ice-cream, a special follow-up visit was made to advise on improved methods.

The sales of loose ice-cream in the city are now very small and the majority of the shops sell only well-known makes of wrapped ice-cream. These have always been found satisfactory, bacteriologically and chemically.

The results are shown in the following table :—

METHYLENE BLUE TEST

Grade	No. of Samples	Percentage	Remarks
1	22	46·8	Good
2	10	21·3	Satisfactory
3	7	14·9	Unsatisfactory
4	8	17·0	Very unsatisfactory

Bacteriological Examination of Food.—Routine bacteriological examinations of various types of food have been carried out during the year and 72 samples have been examined by the Public Health Laboratory Service as follows :—

Boiled Ham	..	..	..	..	1
Sausage	..	..	..	..	2
Bacon	..	..	..	..	1
Cooking Fat	..	..	..	..	2
Turkey Pies	..	..	..	..	14
Liquid Egg	..	..	..	..	20
Egg Vermicelli	..	..	..	..	1
Semolina Cone	..	..	..	..	1
Food Colouring	..	..	..	..	1
Agar-agar	..	..	..	..	4
Chinese Dried Egg	..	..	..	..	1
Baked Sponge	..	..	..	..	1
Rice Pudding	..	..	..	..	1
Leg of Mutton	..	..	..	..	1
Custard	..	..	..	..	1
Potatoes	..	..	..	..	1
Carrots	..	..	..	..	1
Gravy	..	..	..	..	1
Dripping	..	..	..	..	1
Ice-Cream	..	..	..	..	2
Water Ice	..	..	..	..	1
Gum Karaya	..	..	..	..	3
Gelatine	..	..	..	..	8
Gum Acacia	..	..	..	..	2

Reference should be made to the helpful co-operation of the Laboratory staff at all times and for the valued services performed by them.

Extraneous Matter in Food.—The number of complaints from the public of extraneous matter in food is about the same as last year.

During the year the following extraneous matter has been found in food :—

Mouse in bottle of Port
Machine grease in loaf

(Continued)

Nail in Eccles cake.
 Needle in tinned tongue
 Drawing pin in breakfast cereal
 Rodent excreta in ground rice
 Poppy seeds adhering to crab-roll
 Portion of bovine skin in steak pie
 Snail in blackcurrant jam
 Bristles from hand brush in sliced loaf
 Beetle in packet of frozen peas
 Caterpillar in tin of tomatoes
 Nail in Bismarck cake
 Fly in loaf
 Insect fragments, siliceous material, etc., in bottle of beer.
 Hair in digestive biscuit
 Insect in bag of flour
 Insect in beefsteak and kidney pie
 Spider beetle in packet of "All Bran"
 Piece of straw in jar of marmalade
 Nail in bag of flour
 Glass in bottle of grapefruit crush
 Portion of machine belting in ice-cream.

In all cases appropriate action has been taken, but no legal proceedings were necessary.

Fertilisers and Feeding Stuffs Act, 1926.—During the year 11 formal samples of fertilisers and 2 formal samples of feeding stuffs were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. Five of the fertiliser samples were classified as unsatisfactory by analysis or by reason of some non-compliance with the provisions of the Act, and in each case the matter was taken up with the manufacturers concerned.

Rag Flock and Other Filling Materials Act, 1951.—During the year the licences of three premises used for the manufacture of rag flock and one licence of premises used for the storage of rag flock were renewed.

One application was received for the registration of premises where rag flock and other filling materials are used and was granted. One firm closed down and the premises were removed from the register. The total number of registered premises in the city is 55.

Four samples, viz. cotton felt, rag flock (2) and coir fibre, were taken and submitted for analysis to the prescribed analyst. All the samples passed the prescribed tests.

Pharmacy and Poisons Act, 1933 (Part II).—The administrative year for the purpose of the above-named Act is the period 1st May to 30th April. The following table gives a detailed summary of the work done during the year ended 30th April, 1960.

Persons on the List on 30th April, 1959	379
Persons added to the List during the year	14
Persons removed from the List during the year	42
Persons on the List on 30th April, 1960	351
Premises on the List on 30th April, 1959	501
Premises added to the List during the year	14
Premises removed from the List during the year	53
Premises on the List on 30th April, 1960	462
Visits paid to :—	
1. Listed Premises in connection with new applications .. .. .	..
2. Listed Premises in connection with unpaid fees .. .. .	..
3. Listed Premises for routine inspection	30
4. Unlisted Premises	1
Contraventions:—	
Persons found to be selling Part II Poisons on Unlisted Premises	1
Listed Sellers found with incorrectly labelled Part II Poisons in stock .. .. .	..
Contraventions dealt with :—	
Persons ceasing to sell Part II Poisons from Unlisted Premises .. .. .	..
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for listing	1
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling .. .. .	..

Legal Proceedings.—Pharmacy and Poisons Act, 1933 (Part II).—A firm of horticultural seedsmen was prosecuted in respect of the following offences :—

- (1) Selling poisons from premises not entered on the Local Authority's List.
- (2) Selling a nicotine poison to a person not known to the seller.
- (3) Failing to cause an entry to be made in the Poisons Register.

The firm was found guilty and fined a total of £47 10s. and ordered to pay £2 10s. costs.

Pharmacy and Medicines Act, 1941.—During the year three samples showed contraventions of this Act. Particulars of the contraventions were notified to the manufacturers. No legal proceedings were taken.

SAMPLING OF MILK

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

Supervisory Inspector H. Long reports that the sampling officers in the Food and Dairies Section have taken, in all, 3,732 samples of milk for examination. The figure was made up of 2,512 chemical samples, 1,126 bacteriological samples and 94 biological samples.

The milk supplies to the city have remained satisfactory and the average composition of the 2,512 samples submitted was :— Non-fatty solids 8.72 per cent., Fat 3.70 per cent., Total Solids 12.42 per cent.

One new dairy was completed and brought into working operation. This resulted from two of the larger dairies in the city merging together to form one Company. The building is of modern construction with the latest mechanical equipment installed. Automatic tipping lines and crate loading machines have been fitted and these have proved to be very satisfactory.

At the largest dairy in the city alterations have been made and here also a fully automatic tipping line has been introduced. This has resulted in considerable saving of labour and has worked satisfactorily.

In the past year several milk "vendor machines" have been brought into use. Some of these were installed in factories and others at various points in the city for use by the general public. No difficulties have been experienced from the introduction of these machines although on one occasion a complaint was made to the Department relating to the souring of the milk; on investigation it was found that the fault was due to an electrical power failure which had put the machine out of action.

One of the greatest problems relating to the distribution of milk is still the number of empty milk bottles which are left lying in the street. This nuisance is particularly noticeable in the city centre.

Although it has arisen in part by the dairy companies failing to collect the empty bottles, the greater part of the problem has arisen outside the shops and offices to which the supplies are delivered. Very often the empty bottles were kept on the premises for long periods and then, instead of one or two bottles being put out for collection daily, a large number has been put out at infrequent intervals. The roundsman has then been unable to remove all the bottles and the remainder have been left on the street. Unfortunately the bottles, in many instances, have not been rinsed before putting out and they soon become very filthy. This is an aspect which enhances the value of the non-returnable container.

Adulterated Milk.—During the year under review, 2,512 samples of milk have been taken for the purpose of chemical analysis by the sampling officers. Of this number the City Analyst adversely reported on 46. 14 were found to contain added water, 31 showed a fat deficiency and one contained a quantity of dirt. From the unsatisfactory samples, legal proceedings involving 4 of the samples were instituted against two farmers. In some cases of bad fat deficiencies from natural causes the farmer was informed by letter as also was the County Milk Executive Officer.

Dairy Inspection and Milk Sampling.—The following visits were paid during the year by the Food and Drugs Inspectors :—

To dairies	521
To pasteurising and sterilising plants	237
To bottled milk shops	17
Other visits of enquiry	177
No access visits	22
Attendance at Court	25
Visits in connection with adulterated samples..	51

During the year, 1,126 samples of milk were submitted to the City Analyst for bacteriological examination. The samples were taken from dairies, schools and retailers in the streets. They were taken from the following grades of milk :—

" Pasteurised "	284
" Tuberculin Tested " (Pasteurised)	302
" Sterilised "	104
" Tuberculin Tested " (Farm Bottled)	436

Bacteriological Examination of Milk.—Of the 1,126 samples submitted to the City Analyst for bacteriological examination, 6 failed to pass the methylene blue test and 1 failed to pass the phosphatase test.

METHYLENE BLUE (REDUCTION) TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percentage	No.	Percentage
*Pasteurised { Dairies ..	157	157	100·0	..	..
{ Schools ..	127	127	100·0	..	..
*Tuberculin Tested { Dairies ..	267	267	100·0	..	..
(Pasteurised) { Schools ..	35	35	100·0	..	..
†Tuberculin Tested (Farm bottled) Dairies	436	430	98·6	6	1·4

*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

†Satisfactory samples not to decolourise Methylene Blue at 37°C. in 4½ hours, May to October, or 5½ hours, November to April.

PHOSPHATASE TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percentage	No.	Percentage
Pasteurised { Dairies ..	157	157	100·0	..	..
{ Schools ..	127	127	100·0	..	..
Tuberculin Tested { Dairies ..	267	266	99·6	1	0·4
(Pasteurised) { Schools ..	35	35	100·0	..	..

Satisfactory samples not to give colour reading of more than 2·3 Lovibond Blue Units.

TURBIDITY TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percentage	No.	Percentage
Sterilised	104	104	100·0	..	..

Dairies and Milk Sellers.—The following tables show the number of registered dairies and milk sellers in the city :—

DISTRIBUTORS OF MILK AND DAIRY PREMISES.

	Dairies	Distrib- utors of milk
No. on the register on 31st December, 1958 ..	32	35
No. added to the register during the year .. ..	..	1
No. removed from the register during the year ..	4	4
No. on the register on 31st December, 1959	28	32

DISTRIBUTORS OF BOTTLED MILK ONLY.

No. of distributors of milk on the register on 31st December, 1958.. .. .	893
No. added to the register during the year	112
No. removed from the register during the year.. ..	109
No. of distributors of milk on the register on 31st December, 1959	896
No. of shops, etc., from which bottled milk only is sold, on 31st December, 1959	1,155

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATION) REGULATIONS, 1949-1954.

Description	Number in force on 31st December		
	1957	1958	1959
To use the designation "Tuberculin Tested"—			
1. To sell by retail	156	156	160
To use the designation "Pasteurised"—			
1. Pasteurisers' Licences	4	5	4
2. To sell by retail	168	174	173
To use the designation "Sterilised"—			
1. Sterilisers' Licences	2	2	2
2. To sell by retail	1,038	1,063	1,091

Biological Examination of Milk.—During the year 94 samples of milk were submitted to the Public Health Laboratory Service at Leeds for biological examination for the presence of tubercle bacilli. The results are shown in the following table :—

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percent- age	No.	Percent- age
Tuberculin Tested ..	55	..	..	55	100·0
Pasteurised.. ..	..	..	..	..	..
Tuberculin Tested (Pasteurised) .. ..	..	..	..	..	..
Ungraded	39	..	..	39	100·0
Total	94	..	..	94	100·0

The Milk and Dairies (General) Regulations, 1959—Regulation 20.—During the year it was not found necessary to serve any notices under the above-mentioned Regulations.

**SUMMONSES ISSUED DURING 1959 UNDER THE FOOD AND
DRUGS ACT, 1955.**

No. of Sample	Article.	Adulteration or Deficiency.	Result of Hearing.
277/W	Milk	3.5% added water ..	Fined £4 and ordered to pay £2 16s. costs. Producer.
290/W		3.0% added water ..	
298/W	Pork Sausage	26.0% deficient in meat ..	Fined £20 and ordered to pay £2 10s. costs. Manufacturer.
316/L	Pure Grape Brandy	10.0% deficient in proof spirit	Fined £10 and ordered to pay £2 10s. costs. Importers.
968/W	Pork Sausage	33.0% deficient in meat content	Fined £10 and ordered to pay £2 10s. costs. Manufacturer.
129/A	Lemon Barley	46.6% deficient in sugar content	Fined £25 and ordered to pay £2 10s. costs. Manufacturer.
1536/W	Milk	4.3% added water ..	Fined £15 and ordered to pay £2 16s. costs. Producer.
1541/W		7.9% added water ..	
521/W	Pork Sausage	29.0% deficient in meat content	Fined £15 and ordered to pay £2 13s. costs. Manufacturer.
585/A	Buttered Teacake	Spread with margarine ..	Fined £10 and ordered to pay £2 10s. costs. Retailer.
363/A	Tinned Roast Chicken	Label calculated to mislead as to the substance of the contents of the tin in that it contained 56% added water	Fined £10 and ordered to pay £2 10s. costs. Manufacturer.
398/A	Bread and Butter	Spread with margarine ..	Fined £20. Retailer.
284/M	Cream Doughnuts	Filled with imitation cream..	Fined £20. Baker.

MEAT INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

Statistical data in this section of the Report has been compiled from reports submitted by Mr. D. Forbes, Supervisory Public Health Inspector for Meat and Other Foods.

Animals Slaughtered.—During the year 280,123 animals were slaughtered for human consumption at the Public Abattoir and private slaughterhouses, an increase of 15,844 on the figure for 1958.

The class of animal slaughtered in the city remains good apart from casualties brought into the abattoir. The Leeds Abattoir appears to be used for the disposal of casualties from quite a large area around the city, due to some local slaughterhouses refusing to accept casualties.

ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR AND PRIVATE SLAUGHTERHOUSES.

	Year	Cattle ex.Cows	Cows	Calves	Sheep	Pigs	Total
Public Abattoir ..	{ 1958	22,653	11,563	17,394	134,392	19,076	205,078
	{ 1959	21,771	9,267	14,905	160,271	19,029	225,243
Danube Road ..	{ 1958	5,184	..	..	11,567	11,410	28,161
	{ 1959	4,166	..	..	10,348	10,094	24,608
26, Gelderd Road ..	{ 1958	..	..	..	..	21,772	21,772
	{ 1959	14	..	..	1,187	19,347	20,548
Marshall Street, Cross- gates	{ 1958	247	..	3	1,218	2,191	3,659
	{ 1959	223	..	1	1,518	1,810	3,552
Cross Lane, Wortley	{ 1958	303	318	4	1,374	3	2,002
	{ 1959	246	158	..	2,335	..	2,739
Harrison's Yard, Bramley	{ 1958	..	..	..	..	3,607	3,607
	{ 1959	..	..	..	190	3,243	3,433

It can be seen from the foregoing table that the number of bovine animals slaughtered for human consumption has decreased from 57,669 in 1958 to 50,751 in 1959. The decreases were as follows :—cattle 4,423, calves 2,495. There was an increase of 27,298 in the number of sheep slaughtered and a decrease of 4,536 in the number of pigs slaughtered.

The Slaughterhouses Act, 1958.—A report setting out the existing and probable future requirements of Leeds in regard to slaughterhouse facilities and stating what facilities are in fact likely to become available to meet requirements was prepared and submitted to the Ministry of Agriculture, Fisheries and Food. A verbatim copy of the report follows.

CITY OF LEEDS

REPORT ON SLAUGHTERHOUSE FACILITIES

Slaughterhouses Act, 1958, Sec. 3 and Circular FSH 4/59.

1. *The Existing Slaughterhouse Facilities.*

The existing slaughterhouse facilities in the City of Leeds are five Private Slaughterhouses and one Public Slaughterhouse and details of these are set out hereunder.

<i>Address of Slaughterhouse</i>	<i>Name and Address of Occupier</i>
Harrison's Yard, Bramley, Leeds ..	E. Taylor, 11, Halliday Avenue, Leeds, 12.
Cross Lane, Wortley, Leeds ..	J. W. Ellison, 61, Greenhill Lane, Leeds, 12. C. H. Ellison, 129, Littlemoor Road, Pudsey.
Marshall Street, Crossgates, Leeds ..	Mrs. S. Wilson & H. Lunn T/A. Wilsons, 38, Austhorpe Road, Leeds.
16, Gelderd Road, Leeds ..	T. Adamson & Sons, Stanks Farm, Crossgates, Leeds.
Danube Road, Leeds ..	Leeds Industrial Co-operative Society Limited, 10, Albion Street, Leeds.
Public Slaughterhouse, Harper Street, Leeds	Leeds Corporation, City Markets Department, Kirkgate Market, Leeds.

2. *The probable future requirements of the district for slaughterhouse facilities having regard to the needs both of persons requiring the use of such facilities and of other persons.*

In the last 23 years the population of Leeds has increased from 487,200 in 1935 to 511,600 in 1958. With the re-development that is under construction and is in prospect in the central cleared areas and in the periphery there is likely to be further increase in the population of Leeds in the next decade.

There must also be taken into account the normal practice of the meat trade which is to have peak killing on Monday, Tuesday and Saturdays. It is necessary that our future slaughterhouse facilities should enable this peak killing rate to be properly handled.

It is estimated that the future requirements of the district need slaughterhouse facilities capable of handling a total throughput of 120,000 cattle units.

3. *Slaughterhouse facilities which are, or are likely to become available to meet the slaughtering requirements of Leeds.*
- (a) Premises which already comply with all the requirements of construction regulations for the time being in force in respect of new slaughterhouses.Nil.
- (b) Premises in use which do not comply with the requirements of the construction regulations but which the local authority expect to comply by the date recommended by them in their Report.5.

The following slaughterhouses will be made to comply with the construction regulations and will be kept available to contribute to the slaughterhouse facilities of Leeds. A letter to this effect has been received from the owner of the premises in each case.

- (i) Harrison's Yard, Bramley .. E. Taylor
- (ii) Cross Lane, Wortley, Leeds .. C. H. & J. W. Ellison
- (iii) Marshall Street, Crossgates, Leeds .. Mrs. S. U. Wilson, & H. Lunn (T/A Wilsons)
- (iv) 16, Gelderd Road, Leeds .. T. Adamson & Sons
- (v) Danube Road, Leeds .. Leeds Industrial Co-operative Society Ltd.
- (c) Premises in use which the local authority expect will not comply with the construction regulations by the date recommended by them in their report—I.
- (i) Public Slaughterhouse, Harper Street, Leeds—Leeds Corporation. This slaughterhouse will go out of use and will be replaced by a new public slaughterhouse.

4. *Any Outstanding Applications for New Slaughterhouses.*

- (a) There are no outstanding applications for new slaughterhouse licences.
- (b) Mr. R. W. C. Wilkinson, 133, Carr Moor Side, Leeds, 10, made application for a licence in March, 1956 and submitted plans in connection with the erection of a new slaughterhouse for the slaughter of horses for human consumption, but nothing further has transpired in regard to this matter.
- (c) An enquiry was received on the 9th December, 1958 in regard to the siting possibilities for a new slaughterhouse from the Secretary, Association of Retail Butchers Ltd., No. 15 Balcony, City Wholesale Meat Market, Leeds.
- (d) An outline application for planning permission to construct a new slaughterhouse on a site owned by the Leeds Industrial Co-operative Society Limited at Lowfields Road, Leeds, was submitted to the Corporation on the 21st January, 1959. This planning permission was given on 15th May, 1959.
- (e) A letter was received on 31st October, 1959 from A. England Ltd., Commercial Road, Leeds, 5, stating "We wish to make application for a new slaughterhouse licence in your area. We are unable to define the site at present, but hope to do so in the near future. Therefore, we will be glad if you will include our name on your list of persons requiring slaughtering facilities when you submit your survey to the Minister, under the recent Slaughterhouses Act."

5. *The Authority's recommendation as to the date which the Minister should fix for the construction regulations to apply to all slaughterhouses in the district.*

It is recommended that the date which the Minister might fix for the construction regulations to apply to all slaughterhouses in the district should be 1st January, 1963.
20th November, 1959.

Slaughterhouses.—The licences of five private slaughterhouses were renewed during the year, namely those belonging to the Leeds Industrial Co-operative Society Limited, Danube Road, Leeds; T. Adamson & Sons, 26 Gelderd Road, Leeds; Mrs. S. U. Wilson and H. Lunn (Trading as Wilson's) Marshall Street, Crossgates, Leeds; C. H. and J. W. Ellison, Cross Lane, Wortley, Leeds; and E. Taylor, Harrison's Yard, Bramley, Leeds.

The five private slaughterhouses in the city have continued to kill a good class of animal and have been conducted in a satisfactory manner.

Licensing of premises used for the purpose of confinement of animals awaiting slaughter at a slaughterhouse.—In accordance with the provisions of Section 63(2) of the Food and Drugs Act, 1955, applications were received for the renewal of licences relating to three premises for the confinement of animals awaiting slaughter as follows:—Leeds Industrial Co-operative Society Ltd. (lairage in Gelderd Road); H. Sherburn (lairages at piggeries, Field End Road, Halton) and H. Driver (field at Coal Hill Lane, Rodley). The licences were granted in each case.

Knacker's Yard.—There is only one knacker's yard in the city, namely that belonging to J. R. C. Wilkinson, 133 Carr Moor Side, Hunslet, which was well conducted and accordingly its licence was renewed.

In accordance with the Slaughter of Animals (Prevention of Cruelty) Regulations, 1958, Mr. J. R. C. Wilkinson submitted a return to the Local Authority showing the number of horses slaughtered and the number of carcases of horses received during the year as follows:—

	1958	1959
Horses slaughtered at knacker's yard ..	18	8
Horses slaughtered at collieries	27	45
Horses slaughtered at farms and customers' own premises	5	22
Horse carcases received	26	32

Slaughter of Animals Act, 1958.—During the year 6 new licences to slaughter or stun animals were granted by the City Council and 149 were renewed.

Whole and part carcasses condemned.—The following table shows the different species of animals and the number of whole carcasses or parts condemned for tuberculosis, cysticercosis and other diseases.

CARCASSES INSPECTED AND CONDEMNED.

	Cattle (excluding cows)	Cows	Calves	Sheep and Lambs	Pigs	Horses
NUMBER KILLED ..	26,420	9,425	14,906	175,849	53,523	..
NUMBER INSPECTED ..	26,420	9,425	14,906	175,849	53,523	..
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCI						
Whole carcasses con- demned ..	34	62	149	428	45	..
Carcases of which some part or organ was condemned ..	2,201	709	99	15,746	3,054	..
Percentage of numbers inspected affected with diseases other than Tuberculosis and Cysticerci ..	8.46	8.18	1.66	9.20	5.79	..
TUBERCULOSIS ONLY						
Whole carcasses con- demned ..	32	26	..	..	19	..
Carcases of which some part or organ was condemned ..	1,271	384	..	1	722	..
Percentage of numbers inspected affected with tuberculosis ..	4.93	4.35	..	0.001	1.38	..
CYSTICERCOSIS						
Carcases of which some part or organ was condemned ..	25	3	..	..	..	..
Carcases submitted to treatment by refrig- eration ..	..	..	..	..	..	..
Generalised and totally condemned ..	..	..	..	..	..	..

Cysticercus Bovis and Ovis.—Inspection continued in the approved manner. 25 bullocks and 3 cows were found to be infested with this parasite mostly with single degenerated cysts. No case was considered serious enough to put in cold storage. A continuing reduction in the number of cases was noted. It would seem that infestation by this cyst is being gradually brought under control.

The Slaughterhouses (Meat Inspection Grant) Regulations, 1958.—For many years the weekly kill has been in excess of the requirements of the city.

Details of the figures upon which the applications were based are set out in the following table :—

	1956-7	1957-8	1958-9	1959-60
Total units inspected	926,139	972,906	906,895	909,150
*Datum figure ..	762,900	765,150	767,400	769,950
Export figure ..	163,239	207,756	139,495	139,200

* Datum figure based upon population $\times 1.5$ caput figure.

Meat and Other Foods condemned as unsound.—The total weight of food destroyed by consent during the year was 475,867 lbs. as compared with 512,461 lbs. in the previous year. About 61 per cent. of the total weight condemned comprised carcasses of cattle, swine and sheep or parts of carcasses and offal found to be diseased at the time of slaughter.

Details of food destroyed are given in the table on page 176.

Disposal of Condemned Food.—The wholesale butchers disposed of their own condemned carcasses, the bulk going to the firm of Mitchell and Broadbent of Halifax. Bones, sheep and calf heads are now disposed of by the Northern Butchers Ltd., Water Lane, Leeds. Both these firms used the material for the manufacture of meat meal for animal consumption or for fertiliser. A company owning a private slaughterhouse has sold its condemned meat and offal to the firm of Messrs. Wadsworth, Barnsley, where it was put through a digester and used for meat meal and fertiliser. All condemned meat and offal were stained with a vegetable dye before leaving the premises of slaughter.

All other condemned food, including tinned goods, fruit and vegetables, etc., were disposed of by incineration at the Corporation Destructors.

MEAT, ETC., DESTROYED BY CONSENT.

	1959	1958	1957	1956
Beef	94,203 lbs.	116,527 lbs.	124,296 lbs.	142,457 lbs.
Veal	5,649 "	5,699 "	5,763 "	3,578 "
Mutton	25,701 "	15,378 "	15,053 "	11,902 "
Pork	18,973 "	22,366 "	27,062 "	27,488 "
Bacon and Ham ..	313 "	813 "	232 "	256 "
Offals	145,669 "	188,165 "	184,900 "	185,107 "
Rabbits	1,467 "	804 "	715 "	169 "
Poultry	1,476 "	858 "	770 "	1,561 "
Game	509 "	37 "	26 "	220 "
Horseflesh .. ..	..	..	..	..
Horse Offals .. ..	..	..	..	..
Fish	16,123 lbs.	13,744 lbs.	21,518 lbs.	29,826 lbs.
Shellfish	714 "	127 "	3,184 "	4,924 "
Vegetables	96,938 "	67,702 "	38,413 "	39,786 "
Fruit	16,787 "	9,848 "	14,224 "	8,451 "
Tinned goods	46,363 "	49,086 "	51,576 "	39,277 "
Cheese	70 "	57 "	124 "	131 "
Edible fungi	304 "	..	..	152 "
Bread and Cereals ..	479 "	1,214 lbs.	..	200 "
Flour	140 "	..	..	..
Confectionery .. ..	..	138 lbs.	378 lbs.	508 lbs.
Sundries	3,989 lbs.	19,898 "	3,267 "	6,504 "
Totals	475,867 lbs.	512,461 lbs.	491,501 lbs.	502,497 lbs.

Fish.—The wholesale fish trade has continued in much the same way as in previous years. Good wholesome fish has arrived at Leeds when fish was plentiful, and poor quality has arrived in bad weather when fish was scarce.

Frozen blocks of filleted fish have arrived during the shortage periods. These frozen blocks of filleted fish were in better condition than in previous years. Such fish were filleted and quick-frozen and kept under suitable conditions until needed.

Shellfish.—The only mussels that were delivered to Leeds were purified mussels. Three samples were taken during the year, one from Denmark and two from Eire, all of which were found to be satisfactory.

Salmon and Freshwater Fisheries Act, 1923.—(*Imported Salmon Out of Season Regulations.*)—Two consignments of frozen salmon arrived in the city without certificates, but these were immediately sent from the port when the omission was pointed out.

Rabbits.—The quality of rabbits (fresh) received in Leeds was fairly constant but was lower than the pre-myxomatosis era. Large quantities of frozen Australian rabbits were imported and arrived

in good condition. In some cases there had been some mishap to the ship's refrigeration system and the frozen rabbits had been defrosted and then frozen again; when again thawed out they were found to be sticky and commencing to decompose. These consignments were condemned.

Vegetables.—Condemnation of this commodity in any quantity has occurred when there was a glut and inferior produce could not be sold before becoming unsaleable.

Dried Fruit.—Only small quantities were brought for condemnation, the cause normally being old fruit which had gone mouldy or become infested with maggots.

Fruit.—Information was received that Italian apples which had arrived in Leeds Market were contaminated by an excess of arsenic and lead due to spraying of the fruit in the orchards. Samples were submitted to the City Analyst who found them to contain 6.1 parts per million of arsenic and 19 parts per million of lead, and reported that apples containing more than 1 part per million of arsenic would constitute an offence under the Arsenic in Food Regulations, 1959, and 2 parts per million of lead was the accepted limit. The sale of apples was stopped forthwith and the apples were returned to the shippers in Hull, to be dealt with by that Authority.

Fresh fruit arrived in much better condition than a few years ago. More care was being used in the packing of the fruit in the country of origin.

Tinned Goods.—Large quantities of tinned goods were brought for certificates of condemnation to enable credit to be obtained from the producer.

Cheese.—Very small quantities of cheese were brought for condemnation.

Frozen Liquid Egg.—In response to information from another Authority that *salmonella* had been found in liquid frozen egg produced by a Leeds firm, 12 samples of liquid frozen egg and 8 samples of hen egg white were taken from the remainder of the firm's stock which was held in a local cold stores. Of these, one sample was found to contain *Salmonella Menston* and the tin was condemned, the remainder being passed as fit for human consumption.

Frozen Turkey Pies.—A complaint was received from one of the school kitchens about the condition of some turkey pies (supplied by a Welsh firm) which were partially cooked, then “quick-frozen” and kept under refrigeration until needed, when they were required to be re-heated. Some of the pies showed signs of decomposition and 12 samples were examined at the Public Health Laboratory, Leeds. Ten of the samples gave heavy growth of coliform organisms or *enterococci*. The remaining two samples produced a relatively scanty growth, mainly *enterococci*.

Accordingly a further dozen pies were examined. The pies looked, smelled and tasted normal. Bacterial counts varied from 2,000,000 to 40,000,000 per gram. The organisms present were mainly non-fæcal coliforms, *enterococci* or fæcal coliforms. The Medical Officer of Health decided that the large stocks of these pies held in cold store could be sold on condition that the customer was informed that they must be used within twelve hours of removal from cold storage. No further complaint was received by this Department.

DISEASES OF ANIMALS

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

Tuberculosis Order of 1938.—No cases of bovines suspected to be affected with tuberculosis were reported during the year.

Swine Fever Order of 1938.—During the year only one case of suspected swine fever was notified. This was investigated by the Ministry of Agriculture, Fisheries and Food and the case was confirmed.

Regulation of Movement of Swine Order, 1959.—Under this Order, 260 licences for the disposal of 2,129 store and fat pigs from the Whitkirk Auction Mart were issued and 492 visits have been paid to pig-keeping premises to ascertain whether the recently removed store pigs were detained and isolated for the appropriate period. In addition 60 licences have been issued for the movement of pigs within the city.

Anthrax Order of 1938.—Two cases of suspected anthrax at the Public Abattoir Lairage were notified during the year ; on post-mortem examination of the carcasses it was found that death had ensued from causes other than anthrax.

Foot-and-Mouth Disease.—Two outbreaks of this disease occurred in Yorkshire during the year, one being at a number of farms in the Leeds city area and another at a farm in Haverah Park, near Harrogate. In addition to these outbreaks a case was found to exist among cattle received on consignment at the Bradford Abattoir.

In all three cases, the whole of the city was declared to be an " Infected Area " for the purposes of the Foot-and-Mouth Disease Order, 1928, the appropriate restrictions being enforced. With regard to the Leeds outbreak, a special report follows hereunder :—

Notification of the Outbreak.—The first intimation of the possibility of an outbreak came in the form of a telephone call from the office of the Animal Health Division of the Ministry of Agriculture, Fisheries and Food, Weetwood Lane, Leeds, 16, on Wednesday, November 18th, 1959. This stated that a number of beasts and pigs at Templethorpe Farm, Newsam Green, Leeds, were suffering

from an indeterminate condition and that the possibility of Foot-and-Mouth Disease could not be ruled out. Form A declaring the premises to be an "Infected Place" within the meaning of the Diseases of Animals Act was forthwith served upon the farmer concerned by the Lay Inspector under the Diseases of Animals Act, thus prohibiting the movement of animals and articles of equipment from the premises without written authority. Form A was also served upon some neighbouring premises in the same occupation, namely, Lawns Farm.

Forty-eight hours later, following a bacteriological examination by the Ministry, information was received to the effect that Foot-and-Mouth Disease did in fact exist at the suspected farms.

Declaration of Infected Area.—The policy in this country in connection with confirmed outbreaks of Foot-and-Mouth Disease is to declare an "Infected Area" around the premises concerned, the radius of which is some fifteen miles. Within this area certain restrictions are imposed, particularly in relation to the movement of livestock, the holding of markets, etc. The precise boundaries of the "Infected Area" in connection with the Leeds outbreak were telephoned to the Public Health Department on Friday, November 20th, some hours after the original disease confirmation had been received. This information was then plotted on the appropriate maps in the Department to facilitate the work of movement licensing and the answering of the numerous telephone queries.

Erection of Warning Signs.—One of the first tasks undertaken in an outbreak of this type is the erection of Warning Notice Boards at the points of entry into the "Infected Area" lying along the city boundaries. The City Police Mobile Division were accordingly requested to undertake the fixing of these signs at the north-western approaches to the city. The photograph opposite shows a Foot-and-Mouth Disease Infected Area Sign, and an examination of a movement licence carried by the driver of the livestock vehicle.

Whitkirk Auction Mart.—The Foot-and-Mouth (Infected Areas Restrictions) Order prohibits the holding of markets and sales of livestock otherwise than in accordance with the conditions of a licence issued by the local authority. Within a radius of five miles of the "Infected Place" such markets are prohibited absolutely. The normal Monday markets at Whitkirk were therefore transferred to Selby, the latter town being outside the "Infected Area."



Examination of Movement Licence at boundary of Foot-and-Mouth Disease Infected Area



The cleansing and disinfection of a livestock vehicle being carried out at the Victoria Cattle Market during the Foot-and-Mouth Disease outbreak

Removal of Slaughterhouse Refuse, etc.—The removal of slaughterhouse refuse, waste meat trimmings, farmyard manure and similar potential vehicles of infection presents certain problems to a local authority in a Foot-and-Mouth locality. Stringent control of such material was therefore maintained throughout the outbreak, written authorisations being issued in certain cases for the removal of such material.

Vehicle Disinfection.—Special arrangements were made to secure that all vehicles conveying livestock into the city underwent a process of disinfection and cleansing, the premises of the Victoria Cattle Market being utilised for this purpose. The photograph opposite shows the cleansing and disinfection of a livestock vehicle being carried out at the Victoria Cattle Market during the Foot-and-Mouth Disease outbreak.

Movement of livestock.—Considerable power is vested in a local authority within an " Infected Area " with regard to the movement of animals within the Area. It is obvious that strict control of such movements is essential, this control being effected by the issue of licences. The object of such licensing is threefold ; (1) maintenance of effective control and supervision of movement, (2) the segregation of recently moved animals and (3) the subsequent tracing of movements.

During the first ten days of the outbreak, such movements were restricted to the transport of livestock for immediate slaughter, and during this time 536 licences were issued in relation to the movement of some 8,000 animals into the city slaughterhouses.

Progress of the Outbreak.—In addition to the original infected premises the outbreak spread to three further farms in the city, namely, Thorpe Hall Farm, Skelton Moor Farm and Temple House Farm, all of which are in the same vicinity. Form A was in each case served by this Department.

In accordance with the normal policy adopted in this country the whole of the stock at each of these farms was slaughtered. The carcasses were buried on the premises.

The final cases of the outbreak occurred among swine at Temple House Farm on November 24th and following a lapse of some fourteen days an Order was issued from the Head Office of the Ministry contracting the " Infected Area " to one of some five miles

around the " Infected Places." The whole of the city was, however, retained in the " Infected Area " for a further period of seven days, the eventual release from restrictions being effected by Special Order No. 15/59 on December 16th.

Thus ended the first outbreak of Foot-and-Mouth Disease within the city boundaries for some considerable time, an outbreak which in all lasted for 26 days and was responsible for the slaughter of a total of 325 animals.

The following table sets out particulars of the outbreak insofar as it related to the individual farms in the city :—

Address of infected premises	Date of Outbreak	No. of Animals slaughtered	
		Swine	Cattle
Templethorpe Farm, Newsam Green, Leeds	18/11/59	3	15
Lawns Farm, Newsam Green, Leeds..	18/11/59	15	40
Leeds Corporation, Cleansing Department—Thorpe Hall Farm, Knostrop, Leeds	21/11/59	153	..
Skelton Moor Farm, Knostrop, Leeds..	22/11/59	13	14
Temple House Farm, Newsam Green, Leeds	24/11/59	72	..
Totals Animals Slaughtered		256	69

Fowl Pest Order of 1936.—During the year two suspected cases of Fowl Pest were reported by the Ministry of Agriculture, Fisheries and Food but were not confirmed.

The Poultry Premises and Vehicles (Disinfection) Order, 1956.—During the year 66 visits were paid to the Jewish poultry dealers in this city to inspect their premises, vehicles and equipment. In general it has been found that cleansing and disinfection of premises, vehicles and crates has been satisfactory during the year.

The Live Poultry (Movement Records) Order, 1958.—The records of the movement of poultry by persons carrying on the business of slaughtering poultry have been inspected and found to be satisfactory.

Warble Fly (Dressing of Cattle) Order of 1948.—The following measures were adopted in connection with the enforcement of the above-mentioned Order :—copies of the Order in pamphlet form were delivered by hand to cattle farmers, together with a postcard (pre-paid) asking that in the event of infestation being discovered, the postcards be completed and returned. Posters received from the Ministry of Agriculture, Fisheries and Food were prominently displayed at the Whitkirk Auction Mart, the Corn Exchange and the Public Abattoir, Leeds.

During the period of the operation of the Order all premises where cattle are kept were visited and the cattle inspected.

Notification by postcard of intention to dress infested cattle was received at this office from three owners and the farms in question were visited for the purpose of inspection and supervising dressing, the number of cattle involved, being 9.

The Lay Inspector under the Diseases of Animals Act found six infested cattle in the course of routine inspection. In addition to the above, 503 non-infested cattle were treated voluntarily.

There was a considerable decrease on the previous year in the number of infested cattle. Of the 51 infested cattle, 36 were from cattle imported from Ireland to a farm in the city. These animals were examined at the Port of Landing by a Veterinary Officer of the Ministry and found to be infested with Warble Fly. Instructions were issued for the animals to be dressed on arrival at the farm, the dressing being carried out under the supervision of the Lay Inspector.

It was found that personal visits and talks with the owners were effective in securing their co-operation.

It was not found necessary to institute any proceedings under the Order.

DETAILS OF WORK DONE				1957	1958	1959
No. of visits paid to farms .. .. .	..	..	..	105	149	147
No. of cattle inspected on farms .. ..	..	..	..	1,376	1,511	1,052
No. of leaflets and cards distributed ..	..	..	..	52	64	49
No. of cattle infested .. .. .	..	..	..	93	150	51
No. of infested cattle treated .. .. .	..	..	..	93	150	51
No. of non-infested cattle treated voluntarily ..	..	..	..	581	507	503

The Sheep Scab Order, 1938.—Under the Sheep Dipping Regulations all sheep are required to be dipped in an approved dip during the period 1st September to 15th December.

All farms within the city boundary were visited and it was found that only nine farms were keeping sheep.

Nine farms undertook the dipping of sheep in accordance with the above Regulations. At eight of these farms this was done under observation by an inspector from this Department. In the case of the remaining farm (Mount Pleasant Farm), owing to the close proximity of the reservoir the sheep were dipped at a neighbouring farm in the West Riding Area.

The undermentioned list gives sheep farms and the number of sheep dipped.

D. W. Osborne, White Laithe Farm, Seacroft	60	sheep	dipped
O. Lister, Black Hill Farm, Eccup ..	218	„	„
H. O. Peate, Owlet Hall Farm, Eccup ..	70	„	„
G. S. Leake, Grimesdyke Farm, Whinmoor..	218	„	„
G. H. Dalby, Bank House Farm, Eccup ..	98	„	„
J. S. & J. W. Rowling, King Lane Farm, Alwoodley	95	„	„
G. Whitfield, Park Farm, Colton ..	34	„	„
H. Warrington, Grove Farm, Eccup ..	44	„	„
E. E. Todd, Mount Pleasant Farm, Eccup..	67	„	„

Animals (Landing from Channel Islands, Isle of Man, Northern Ireland and Republic of Ireland) Order, 1955.—During the year 3,568 Irish sheep were received under licence for immediate slaughter at the Public Abattoir, Leeds and the Leeds Industrial Co-operative Society Ltd. Slaughterhouse, Gelderd Road, Leeds. As compared with the previous year the number of imported sheep decreased by 3,065.

Diseases of Animals Act, 1950 (Second Schedule).—During the year 4,540 Irish cattle were received under licence for immediate slaughter at the Public Abattoir, Leeds, and the Leeds Industrial Co-operative Society Ltd. Slaughterhouse, Gelderd Road, Leeds. In addition 47 licensed Irish store cattle were received at a farm in the city and these were all duly inspected on arrival; further visits were paid to see that they were isolated and detained for the

prescribed period of six clear days following their arrival in accordance with the Order. As compared with the previous year, the number of imported cattle increased by 720.

The Diseases of Animals (Waste Foods) Order, 1957.—During the year 13 new applications were received for licences to operate waste food boiling plants under the above-mentioned Order. There were 99 licensed boiling plants in the city at the end of the year. Visits to boiling plants during the year numbered 140.

Legal Proceedings.—A farmer and a livestock waggon driver in his employ were prosecuted for moving animals through a Foot-and-Mouth Disease Infected Area without a licence at a time when the city was under restrictions consequent upon an outbreak of the disease at Newsam Green. The defendants were found guilty and given an absolute discharge and ordered to pay 4s. costs in each case.



General Sanitation

INSPECTION OF FACTORIES

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

Mr. J. Norton, Supervisory Inspector of the Factories Section, has furnished details for this part of the Report as follows.

A major part of the work of the Factories Section of the Department in 1959 has been devoted to the enforcement of the Clean Air Act, 1956, and in particular with the provisions of the Act which deal with the establishment of Smoke Control Areas. The amount of work involved in this has rapidly increased to such an extent that the time devoted to the inspection of factories has, of necessity, been somewhat reduced. Details of the smoke abatement work are set out in the section of this Report which deals with the prevention of atmospheric pollution.

Factories.—Inspection of factories has been done by inspectors working in the Factories Section of the Department, and details of the work done in this connection during 1959 are set out in the four tables printed on pages 193 and 194.

Under Section 128 (3) (a) of the Factories Act, 1937, the Medical Officer of Health of every Council of a Borough or County District is required in his Annual Report to the Council to report specifically on the administration of, and to furnish the prescribed particulars with reference to, matters under Parts I and VIII of that Act. He is also required to send the Minister of Labour a copy of his Annual Report or as much of it as deals with Parts I and VIII of the Factories Act, 1937. Prior to this year these particulars have been forwarded on a prescribed form in advance of the narrative Annual Report to the Minister of Labour. It has now been decided that in future the separate submission of the prescribed particulars to the Minister of Labour will not be necessary, and that Medical Officers of Health should include the prescribed particulars in their reports.

Means of escape in case of fire is dealt with by inspectors working under the direction of the City Engineer and no details of the work done in this connection are available.

The register of factories which the City Council is required to keep now contains the addresses of 180 non-mechanical factories and 2,985 mechanical factories. This represents no change in the number of factories since the end of 1958. In addition to the factories registered there were some 67 other premises in which Section 7 of the Factories Act, 1937, is enforced by the City Council. This is the Section which deals with the provision of sanitary accommodation. The 67 premises mentioned above are works of building and engineering construction.

During the year 1,048 inspections of mechanical and non-mechanical factories were made in order to ascertain whether the provisions of the Factories Act were being contravened. Contraventions of the Act or other defects were found in 179 instances during the year, and 157 of these were remedied by the end of the year. A number of notices were served dealing with these contraventions. All works which are outstanding at the end of the year will be followed up and enforcement action taken in due course. There has been no necessity during the year to institute proceedings to enforce compliance with the Act.

During 1959, some 19 visits were paid to building sites to check whether or not adequate sanitary accommodation was provided for the workpeople, and in 3 instances notices were served requiring the provision of or improvement to sanitary accommodation. On building sites where it is impossible to provide water closet accommodation, suitable chemical closets properly screened and provided with proper deodorising fluids are accepted as reasonable accommodation, but as soon as it is possible to provide water closets the chemical closets are dispensed with.

The table of cases in which defects were found on page 193 contains details of 31 reports which were received from Her Majesty's Inspector listed under various headings.

During the year four non-mechanical factories were found to be in a dirty condition and action was taken to secure a remedy for these conditions. In reports received from Her Majesty's Inspectors, 31 factories were said to have deficiencies in the sanitary accommodation provided for employees. Action has been taken to deal with all these complaints.

The table which is headed "Other Matters" and which is printed on page 194 gives the number of bakehouses in the register of factories as 141. This number includes 2 non-mechanical bakehouses and 139 mechanical bakehouses. It does not include all bakehouses in the city as there are a number of small family bakehouses which are not registered under the Factories Act by Her Majesty's Inspectors. The numbers of such bakehouses are rapidly falling principally because of the very intensive competition from the larger mechanical bakehouses which operate upon a wholesale basis. The fall in the number of small bakehouses, apart from the competition just mentioned, has been materially affected by the very extensive clearance and planning schemes of the City Council. Many small bakehouses demolished under such schemes are not reopened on alternative premises.

There are no basement bakehouses in the city for which Certificates of Suitability under the Factories Act have been issued.

The tables printed on page 193 and which set out the visits paid to factories and work carried out in factories refer only to work done under the provisions of the Factories Act which have been delegated to the City Council. They do not by any means give a complete picture of the Public Health Inspectors' work in factories in as much as a large number of complaints are received year by year about conditions which can only be dealt with by suitable action under the Public Health Acts or Food and Drugs Act, or the Clean Air Act and other legislation. The figures of work in this connection are absorbed in the table of work done by public health inspectors which is set out on page 209. As an example of this work, inspectors in the Factories Section paid 87 visits during the year to the larger food preparation factories in the city, that is to bakehouses, pickle factories, confectionery factories, etc., and dealt with 122 deficiencies under the provisions of the Food Hygiene Regulations, 1955, as set out on page 155.

Complaints are received from time to time about nuisances caused by various manufacturing and trade processes in the city. For example, complaints have been received of nuisance from dust emissions from dust extraction plants, from smells which originated from spray painting booths, and from fly infestations. All these complaints were dealt with by informal or statutory action under the provisions of the Public Health Act, 1936. A particular complaint,

the solution of which is proving most intractable, refers to smells of gas liquor affecting various factories in the vicinity of one of the larger gas works in the city. The complaints appear to be caused by the discharge of effluents to the sewer, but this has not yet been established. Complaints of this nature often require very long and intensive investigation, and a great deal of the inspectors' time has been devoted to these investigations which cannot be recorded so as to give a true picture of the effort involved in these matters.

Many complaints received concern factories which are registered with Her Majesty's Inspector of Alkali, etc. Works. In all cases such complaints are referred to Her Majesty's Inspector for such action as can be taken, and a very close liaison exists between the Department and the District Alkali Inspectors. It is, of course, possible that discharges which satisfy the Alkali Inspector will still create nuisance to surrounding properties. In such cases the Department has asked for works to be done in excess of those required by the Alkali Inspectors. Complaints of nuisance from noise and vibration continue to increase. Many of these complaints refer to noises caused by factories working during the evenings and through the night, and in consequence of this inspectors have paid numerous visits at night. The most notable instance of this was a case where inspectors were required to visit premises at 3 a.m. to determine whether complaints were justified. The number of noise nuisances reported was 17, and of these 6 were regarded as not justified. In the remaining cases a remedy has been found or investigations are continuing. Investigation of these complaints often has proved difficult and the problems intractable. In many cases inspectors have been forced to decide that no nuisance existed which could be dealt with by existing legislation despite strong protestations of nuisance from the complainants. It is difficult to assess the level of noise or the intensity of vibration which can create a nuisance. The only guide we possess at present is a noise level indicator which records sound levels. Whether a particular noise level constitutes a nuisance or not is a matter of opinion. The legal powers used to deal with nuisances from noise are those set out in Section 134 of the Leeds Corporation Act, 1956, which declares any excessive, unreasonable or unnecessary noise to be a nuisance under the provisions of the Public Health Act, 1936.

Nuisances other than those created by processes carried on in factories, and with which public health inspectors are frequently required to deal, are those caused by defects in the structure of factory buildings which affect the health and comfort of workpeople, and which may be regarded as prejudicial to health. Instances of such defects are leaking roofs to factories, defective and leaking eaves-spouting and similar matters.

Many of the factories visited by public health inspectors in the Factories Section are concerned with the production of food-stuffs. In addition many factories are provided with canteens and mess-rooms for the use of the employees. Inspectors spend much time visiting these factories and canteens to ensure that the provisions of the Food Hygiene Regulations, 1955, are complied with. Details of the work done under this heading are included in the section of the Report dealing with Food Hygiene. An arrangement has existed for many years between the City Engineer's Department and this Department for the exchange of information as to the establishment of factories in the city. This arrangement has continued to function satisfactorily and copies of all lists of changes in occupations of factories which are received from Her Majesty's Inspectors are forwarded to the City Engineer. The City Engineer's Department, in turn, asks frequently for the Health Department's opinion upon the siting of particular processes in the city.

Outworkers.—The number of outworkers in the August list was 1,006. 898 of these were concerned with the making of wearing apparel and 108 with textile weaving. In one instance during the year it was necessary to institute proceedings for the non-return of the list of outworkers and the firm concerned was fined £5. The number of addresses of outworkers received from other Authorities was 198 and the number sent from Leeds to other Authorities was 240. During the year 2 inspections of outworkers' premises were made. There were 22 cases of notifiable diseases at outworkers' premises during the year.

Workplaces.—During 1959, 490 visits were paid to workplaces including offices. Conditions generally in these premises were found to be reasonable, but 14 defects of various kinds were dealt with.

Shops.—The provisions of Section 38 of the Shops Act, 1950, are administered by the Health Committee. During the year 373 visits were paid to shops and 23 notices were served in respect of defects found. The defects which were put right in response to these notices are as follows:—

Shops ventilated	5
Washing facilities provided	7
Other defects remedied	17

INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(INCLUDING INSPECTIONS MADE BY PUBLIC HEALTH INSPECTORS)

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	180	25	10	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	2,985	1,023	77	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	67	19	3	..
Total	3,232	1,067	90	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found		Referred		No. of cases in which prosecutions were instituted
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S. 1) ..	4	4	..	..	..
Overcrowding (S. 2) ..	..	..	..	..	..
Unreasonable temperature (S. 3)	1	..	..	..	..
Inadequate ventilation (S. 4) ..	..	..	..	..	..
Ineffective drainage of floors (S. 6) ..	..	..	..	..	..
Sanitary Conveniences (S. 7)—					
(a) Insufficient ..	24	18	..	4	..
(b) Unsuitable or defective ..	136	124	..	22	..
(c) Not separate for sexes ..	12	11	..	5	..
Other offences against the Act (not including offences relating to Outwork) ..	2	..	2	..	..
Total	179	157	2	31	..

SANITATION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

Water.—During the year 374 samples of drinking water were taken by the Department for bacteriological examination. 348 of the samples were taken from the Corporation's mains supply, 8 were samples of well water and 18 samples were taken from springs. 13 samples of town's water were unsatisfactory but subsequent samples taken from the same domestic taps proved satisfactory. Four samples of well water and 13 samples of spring water were unsatisfactory.

Sewage Disposal (Report of Mr. D. Currie, City Engineer).—During 1959, 8.25 per cent. of the bacteria beds were out of action while repairs were in progress. The corresponding figure for 1958 was 8 per cent. The average analyses of final effluent at Knostrop Sewage Works from January 1st to December 31st, 1959, were:—

Oxygen absorbed in 4 hours ..	2.6 parts per 100,000.
Suspended solids	6.1 parts per 100,000.

Public Cleansing (Report of Mr. G. F. Mellor, Director of Public Cleansing).—Particulars of refuse collection and disposal during 1959 are as follows:—

	<i>Tons</i>
Household refuse and nightsoil collected ..	165,322
(a) dealt with at destructors	71,876
(b) disposed of at tips and for agricultural purposes	79,064
(c) number of tons of cesspool contents discharged into Corporation sewers ..	14,382

The quantity of screened refuse dust sold as manure to farmers was 18,948 tons.

Dustbins and Ashpits.—The number of dustbins provided by the Cleansing Department and delivered to dwelling-houses in Leeds during the year was 15,748. The total number provided since the inception of the scheme in December, 1946, is 160,569.

During the year the Health Department secured the abolition of 10 ashpits and the Corporation approved grants-in-aid amounting to £61 rs. 10d. in connection with the abolition of these ashpits.

Water Supply (Report of Mr. K. L. Forster, General Manager and Engineer of the Waterworks Department).—The water supply of the city has been satisfactory bacteriologically and chemically but taste troubles occurred (mainly near end hydrants) during the summer due to algal growths in the storage reservoir at Eccup. On occasions an earthy odour accompanied the taste.

Owing to unusual drought conditions it was necessary to take measures to reduce consumption. These included prohibitions on the use of hosepipes and water for certain non-essential purposes and between 23rd October and 15th November, 1959, alternate night-time shutting-off of supplies.

Bacteriological examinations of raw water arriving at Headingley Filtration Works were made during the year, and the water going into supply after filtration and chlorination was also classified. The following table shows the results of these examinations.

SUMMARY OF BACTERIOLOGICAL EXAMINATIONS

Raw Water Arriving at Headingley Filtration Works	No. of samples	Average Count		
Probable No. of Coliform bacilli in 100 ml. water ..	304	338		
Probable No. of B.Coli Type 1 in 100 ml. water ..	304	169		
Anaerobes in 40 ml. water (Wilson and Blair's Test) ..	45	3		
Agar Plate Count, 48 hours at 37°C. Colonies per ml. ..	47	34		
WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION				
(a) Water entering the Distribution System				
No. of samples	Ministry of Health Classification (1956)			
	Class 1	Class 2	Class 3	Class 4
660	99·55%	0·45%	Nil	Nil
(b) Samples taken from Service Reservoirs and Consumers' Premises (excluding samples taken by Public Health Dept.)				
No. of Samples ..	Satisfactory	Unsatisfactory		
1,080	99·35%	0·65%		

During the year 198 samples of town's water from the public supply were subject to chemical analysis and the table which follows summarises the results of these analyses.

SUMMARY OF ANALYSES OF THE PUBLIC WATER SUPPLY FOR THE YEAR ENDED DECEMBER 31ST, 1959. SUMMARY BASED ON 198 ANALYSES OF SAMPLES OF WATER FROM THE PUBLIC SUPPLY.

	Parts per million except where otherwise stated		
	Average	Maximum	Minimum
*Turbidity (Silica scale)	Less than 2	4	Less than 2
*Colour (Hazen Units)	16	52	5
*pH.	7.25	8.2	6.8
Free Carbon Dioxide	1.6	3.2	Nil
Alkalinity (Carbonate or temporary hardness) (in terms of CaCO_3)	22	31	13
Total Hardness (in terms of CaCO_3)	54	72	44
Non-Carbonate (Permanent) Hardness (in terms of CaCO_3)	32	55	24
Oxygen absorbed from Permanganate in 4 hours at 27°C.	2.0	4.3	0.5
Ammoniacal Nitrogen (in terms of N)	0.004	0.051	Nil
Albuminoid Nitrogen („ „ „ „)	0.045	0.100	0.020
Nitrite Nitrogen („ „ „ „)	Nil	Nil	Nil
Nitrate Nitrogen („ „ „ „)	0.45	0.70	0.20
Chlorine present as Chloride (in terms of Cl)	14	18	12
Silica (in terms of SiO_2)	7	8	6
Iron compounds (in terms of Fe)	0.04	0.45	Nil
Manganese „ („ „ „ Mn)	Nil	Trace	Nil
Lead „ („ „ „ Pb)	Less than 0.01	0.12	Nil
Total solids dried at 180°C.	97	135	87
*Electrical Conductivity—Micro-ohms/ CM_3 at 20°C.	140	185	120
*Residual Chlorine (on reaching consumer)	Nil/Trace		

* Summary based on daily determinations on samples taken from Distribution Mains supplying all parts of the City and weekly determinations on samples from Service Reservoirs

Plumbo-Solvency.—Water leaving the storage reservoir at Eccup is treated with lime at the rate of approximately 5 p.p.m. with the object of producing a water which, after filtration and chlorination, is not plumbo-solvent.

Regular determinations of pH and alkalinity are made on samples of water taken from various points in the distribution system and the determination of lead is included in the chemical analysis of samples which have been drawn through lead pipe. The maximum amount of lead found in 1959 was 0.12 p.p.m.

Action in respect of any form of contamination.—In July, one of the mains supplying Dyneley Reservoir became contaminated after a cross connection with a new main had been made. The reservoir was immediately treated with sodium hypochlorite solution and the main was taken out of service, heavily chlorinated and thoroughly flushed. As a few coliform organisms persisted after this treatment, the operation was repeated after which samples taken at various points along the main were all Class 1.

Particulars of the number of dwelling-houses and the number of the population supplied from the public water mains.—(a) (i) Number of dwelling-houses within the statutory area of supply—178,995, (ii) Number of dwelling-houses attached to shops—6,732 ; (b) Population supplied from the public water mains : (i) direct to houses—520,423 (estimated), (ii) by means of stand-pipes—none. (N.B.—These particulars relate to the statutory area of supply at 31st March, 1960).

The number of cistern water-closets in use at 31st March, 1960, was 216,837.

Keeping of Animals.—The number of pig-keepers in the city decreased to 170 and the number of pigs kept was 4,167.

It was not found necessary to serve notices under the Byelaws with regard to the keeping of swine.

Closet Accommodation.—2 privy middens serving premises in the city were abolished and water-closets provided in lieu. Grants amounting to £60 were paid to owners of the property concerned.

A total of 152 statutory notices was served under the provisions of Section 45, Public Health Act, 1936, in connection with closet accommodation. In the owners default the water-closets appurtenant to 25 houses were repaired at a cost of £79 13s. 6d.

Offensive Trades.—The number of premises in the city where offensive trades are carried on is 110. During the year 52 visits of inspection were made.

Common Lodging Houses.—During the year 254 visits were made to common lodging houses.

Houses-let-in-Lodgings.—The total number of visits paid to houses of this type was 310.

Cellar Dwellings and Underground Sleeping Rooms.—During the year 449 visits were made to underground sleeping rooms.

Caravan Sites.—*Five Lane Ends Camping Site, Eccup.*—Following the Public Enquiry held at the Civic Hall in June, 1958, against the Corporation's Order to prohibit camping on land within the catchment area of Eccup Reservoir, the Minister of Housing and Local Government confirmed the Corporation's Order with effect as from the 1st April, 1960.

Cardigan Lane Camping Site.—An application for the renewal of the licence in respect of the site at 51, Cardigan Lane, for 8 moveable dwellings was granted, subject to the following conditions:—

1. That this licence shall continue in force for a period up to 31st March, 1960.
2. That not more than 8 moveable dwellings be allowed on the site at one time.
3. That the class of moveable dwellings which may be kept thereon shall be of the modern trailer type of proprietary design in good condition and readily mobile.
4. That the caravans shall be situated at least 15 feet apart.
5. That a proper supply of town's water, accessible at all times and properly protected against damage from frost, shall be maintained.
6. (a) That satisfactory water closet accommodation shall be maintained for the caravan dwellers, such accommodation to be separate for the sexes, adequately screened and indicated.
- (b) That a drain inlet shall be provided for the disposal of waste water by the caravan dwellers, and such inlet to be in an appropriate position and indicated.
- (c) that galvanised metal dustbins shall be provided in the ratio of one dustbin to two caravans, such dustbins to be maintained in good condition and provided with tight fitting lids and placed on an approved impervious hard standing.
- (d) that a suitable receptacle shall be provided for the storage of solid fuel in connection with every caravan using such type of fuel.

- (e) that there shall be provided on the surface of each caravan site a suitable approved hard standing, the length and breadth of which shall exceed those of the caravan by 3 ft.
 - (f) that the land shall be provided with suitable approach roads to the hard standings and suitable paths from the hard standings to the accommodation provided by way of dustbins, water closets and water supply.
7. That the trees on the site be preserved.

Licences Refused.—An application was received from Mr. Richard Roberts to use land at 35, Cross Lane, Old Farnley as a site for a moveable dwelling under Section 147 of the Leeds Corporation Act, 1956. The application was refused.

An application was received from Mr. Leonard Gibb to use land at 11, Tinshill Drive, Cookridge, as a site for a moveable dwelling under Section 147 of the Leeds Corporation Act, 1956. The application was refused.

Canal Boats.—The number of canal boats on the register at the end of the year was 119. Periodical visits of inspection were made to wharves and locks and a complete inspection was made of 545 boats.

One new canal boat was registered during the year and the registration of two boats was cancelled at the owners' request as the craft were no longer being used by the crew as a dwelling.

Public Sewers.—During the year 999 public sewers affecting 3,401 houses or other premises were cleansed at a cost to the Department of £1,440 17s. 3d. Works of repair or maintenance were carried out to 144 defective public sewers, and the cost of this work amounting to £1,017 10s. 4d. was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 3,869 drain tests, 179 of these being new drains relaid in place of those found defective. A large number of informal notices was served on owners of property for drainage repairs and in 292 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. 112 statutory notices were served under the provisions of Section 111, Leeds Corporation Act, 1956, in respect of stopped drains.

The drains or other appliances of 76 houses were repaired or renewed by the Department in default as a matter of urgency at a cost of £253 15s. 6d. which was recovered from the owners concerned. The drains of 1,587 houses or other premises belonging to Corporation Departments were cleansed, repaired or renewed at a cost of £1,120 4s. 10d. which was recovered from the Departments concerned.

The cleansing and repair of drains serving 372 houses was undertaken by the Department under the provisions of Section 112, Leeds Corporation Act, 1956, at the owners' request, and the cost of the work, amounting to £485 10s. 9d. was recovered from the owners concerned.

Removal of Persons in need of Care and Attention (Section 47, National Assistance Act, 1948).—During the year many cases of aged, infirm persons alleged to be living in insanitary surroundings, unable to devote to themselves and not receiving from other persons proper care and attention were brought to the notice of the Department. In 5 cases certificates were issued by the Medical Officer of Health under Section 47 of the National Assistance Act, 1948, and the persons concerned were admitted to hospital.

Articles exchanged for Rags.—During the year 3 persons were warned for offences against Section 154 of the Public Health Act, 1936, which places restrictions on the exchanging of articles for rags.

Examination of Plans.—The arrangements whereby certain plans of new work submitted to the Building Surveyor's office are forwarded to this Department for comment continued during the year. 1,278 such plans were forwarded to the Department for the Medical Officer of Health's comments.

District Inspection and Investigation of Complaints.—The total number of houses surveyed and examined was 21,507. The number of complaints investigated during the year was 6,094 and 7,911 nuisances and housing defects were remedied.

The tables on pages 207 to 210 give details of the work done by Public Health Inspectors in 1959.

Notices.—The number of informal notices served in relation to Public Health Act matters was 2,175 and statutory notices served in this connection numbered 1,209.

Hairdressers and Barbers.—During the year, under powers contained in Section 244 of the Leeds Corporation Act, 1956, 36 persons carrying on the trade of hairdresser or barber and their premises in the city were registered. The total number on the register on 31st December, 1959, was 449.

Public Swimming Baths.—Particulars of municipal swimming baths in the city have been supplied by Mr. R. A. Ashton, Director of the Baths and Wash-houses Department, as follows :—

“ There are 9 indoor public swimming bath establishments with a total of 14 swimming pools. The water used for filling is drawn from the town mains. All these pools are fitted with a continual circulating filtration plant, the average turnover being 4 hours. A modern type of chlorinator has been fitted to each filtration plant and the water is subjected to continuous chlorination.

There is also a public open-air pool situated in Roundhay Park and the water for this pool is drawn from the Waterloo Lake. Water for showers, toilets and domestic use is, however, supplied from the town mains. This swimming pool has a filtration plant with a 6 hour turnover. A modern type of chlorinator has been fitted and the water is subjected to continuous chlorination.”

There is also one privately owned public swimming bath in the city and town's water is used for filling the bath which is provided with a circulating filtration plant and continuous chlorination.

During the year 45 samples of swimming bath water were taken by public health inspectors and submitted to the Public Health Laboratory Service for examination. All of these samples were satisfactory with the exception of one sample taken from a Corporation swimming bath which was unsatisfactory, although not seriously so. This was found to be due to a failure of the human element at the time of the attendants' shift change-over. All subsequent samples taken from the same bath proved satisfactory.

Legal Proceedings—Public Health Act, 1936.—During the year 2 owners of dwelling houses were summoned for non-compliance with abatement notices served in respect of nuisances arising from various defects of repair.

In one case the defendant was fined £1 and a nuisance order was made. In the other case no fine was imposed but a nuisance order was made.

Rodent Control.—Mr. W. Pickles, Public Health Inspector in charge of Rodent Control, has reported details of the work of the rodent operatives for inclusion in this section of the Report.

Complaints.—During the year 1,923 complaints were received by the Rodent Control Section. Of this number, 1,009 referred to rats, 823 to mice and 76 to pigeons. There were complaints of damage by rabbits (9), of moles (4), of squirrels (1) and one complaint of the fouling and damage to goods by sparrows.

The following table shows the number of complaints of rats and mice received during the year and analysed according to months and types of premises affected.

1959	Rats					Mice				
	B	PD	LA	A	Total	B	PD	LA	A	Total
January	18	50	3	..	71	20	39	10	..	69
February	19	36	9	..	64	16	33	4	..	53
March ..	13	43	5	..	61	16	30	7	..	53
April ..	17	61	7	..	85	17	37	4	..	58
May ..	21	56	2	..	79	16	37	4	..	57
June ..	26	59	2	..	87	10	39	7	..	56
July ..	21	52	1	..	74	12	36	1	..	49
August ..	19	76	3	..	98	17	35	3	..	55
Sept. ..	19	93	5	..	117	20	57	6	..	83
Oct. ..	25	66	3	1	95	25	65	4	..	94
Nov. ..	34	62	4	..	100	36	69	7	..	112
Decr. ..	22	52	3	1	78	26	50	8	..	84
Total	254	706	47	2	1,009	231	527	65	..	823

B—Business Premises
PD—Private Dwellings

LA—Local Authority's premises only
A—Agricultural or Horticultural Premises

Included in the table under the headings of business premises and private dwellings are complaints of 12 Local Authority owned business premises, 110 Local Authority owned houses where there was some measure of rat infestation, 30 Local Authority business premises and 153 Local Authority houses where mouse infestation was reported.

Inspections.—The total number of inspections made in relation to rodent control for the year was 23,050. The number of inspections and visits made in connection with complaints received and for the servicing of infested premises was 10,937. The figure for inspection of Leeds Corporation sewer manholes was 12,113.

Sewer Baiting.—This work continued throughout the year in accordance with the Ministry's recommendations, and after test baiting, maintenance treatments were proceeded with in the case of manholes where takes were recorded and in the requisite number of manholes on either side. The 1 : 4 : 9 technique of baiting has now been adopted as standard with permanent Warfarin baits in manholes situated in the city centre.

Where manholes could not be baited satisfactorily due to excessive dampness or sloping benching, the method of lowering down the shaft muslin bags containing Warfarin has proved fairly satisfactory. During the year 4,389 manholes were baited.

Treatments.—During the year 947 premises were serviced for some degree of rat or mouse infestation (231 business premises, 680 private dwellings and 36 Local Authority properties). 797 new infestations were recorded ; 377 were found to have mouse infestation and 420 to have some degree of rat infestation. Of these, 786 premises were treated by the Rodent Control Section of the Department. At some properties where there was only slight mouse infestation the occupiers carried out their own treatment ; advice and instructions were given as to the best method of procedure. Monthly treatments with semi-permanent baits are being carried out at a number of business premises, principally as an insurance against reinfestation.

Prevention of Damage by Pests Act, 1949.—Under the Prevention of Damage by Pests Act, 1949, the number of informal notices served for treatment and structural proofing was 19. During the year 40 premises were proofed against rodents and in this regard I would like to comment on the good co-operation that has been given by owners and occupiers of premises and other Departments of the Local Authority ; their help has been much appreciated.

Small proofing works have been carried out by the rodent control staff at the time of servicing as it has been found that delayed proofing, caused by having to wait the convenience of a contractor, has resulted in some measure of reinfestation.

Warfarin.—This still remains the main poison used for surface treatments of rats and mice but doubts have arisen in two or three cases as to whether certain mice had developed a high resistance or an immunity to the drug. It has been found necessary after a certain period of time at these particular premises to change over to an acute poison and trap to bring about satisfactory results. Where these incidents occurred, mice were caught in box traps and four mice were despatched in special containers to the Ministry's Laboratories for their observations.

Experiments are also being carried out in the Department and these are showing that mice relying on Warfarin for their main diet can survive long after the estimated length of time for the drug to take effect. Up to the time of this report one mouse has survived 11 weeks and shows no sign of listlessness or other symptoms which are associated with Warfarin poisoning and 3 others are now in their 7th week of existence. These mice have also been sent to the Ministry's laboratories. No estimated kill by Warfarin has been made but during the year 1,851 dead rodents (including 74 rabbits) were collected and destroyed.

Pigeons.—During the year 76 complaints were received from occupiers of private dwellings and business premises of nuisance from wild pigeons. Each complaint was investigated and action taken in the majority of cases. The total number of inspections and visits was 1,771, and by shooting, trapping and netting the number of pigeons killed was 2,527.

General.—With the siting of light industrial areas on the outskirts of the city, food warehouses are complaining of damage and the fouling of foodstuffs by sparrows. Advice has been given regarding the best method of wiring openable windows, and traps have been loaned in two cases but this nuisance is very difficult to deal with and it is possible that these methods will not supply the answer to the problem.

Diseases spread by rats and mice are numerous and some of these, like Weil's Disease, can be fatal to man. It must be remembered that 30 per cent. of the common rats in Great Britain are carriers of this disease. Human infection occurs chiefly through mud, slime and water contaminated by the urine of diseased rats, the organism entering the body through abrasions to the skin or mucous membranes.

At the request of Dr. La Touche of the Leeds General Infirmary, who was treating a family for Mouse *Favus*, special attention was given to their place of residence. It was found that there was an infestation at the premises and certain mice were caught and delivered to the Hospital where it was proved that this disease had been contracted by the occupiers of the premises from infected mice.

Many infestations can be prevented if trouble is taken to reduce the number of possible places where rats and mice can lie up and nest. Food should be kept in rat proof containers and bins for waste material should be kept in a good condition with tight fitting lids, and cleared as often as may be necessary. This is especially applicable to restaurants, canteens and cafes.

Rats and mice are responsible for an appreciable amount of wastage and although they consume a lot of the nation's food, they foul an even greater amount which must be destroyed; this wastage over the British Isles is estimated at £25,000,000.

Damage to structures has never been assessed but is frequently seen at infested premises in the form of damage to woodwork, electric cables, water pipes, etc., and on occasion their burrowing has caused the collapse of pavings and concrete floors, necessitating extensive works.

Rodent control, is therefore, a job that helps the whole community and is worth doing well.



LEAD PIPES DAMAGED BY RODENTS

$1\frac{1}{2}$ in. waste pipe, showing hole gnawed by rats.
 $\frac{3}{4}$ in. water pipe, showing teeth marks of mice.



ANALYSIS OF INSPECTIONS						(a) Canal Boats & Common Lodging Houses	Food and Dairies	Total
	North Div.	South Div.	East Div.	West Div.	Facto- ries Div.	Hous- ing Div.	(b) Rodent	
DWELLINGS.								
1. Houses fit in all respects	88	82	37	10	..	..	..	217
2. Houses unfit and capable of repair ..	163	53	14	74	..	2	..	306
3. Houses unfit and incapable of repair ..	12	69	65	168	..	1,020	..	1,334
4. Underground dwellings and parts of buildings ..	233	93	1	5	..	117	..	449
5. Houses for drainage	2,983	2,601	4,153	2,865	1	2	..	12,605
6. Houses for ashes accommodation	243	216	364	411	..	..	..	1,234
7. Houses for closet accommodation	843	280	690	162	..	..	..	1,975
8. Houses for complaints and defects	1,792	1,381	1,409	1,512	..	..	..	6,094
9. Houses for infectious diseases	3	..	18	1	..	..	..	22
10. Houses for overcrowding	32	34	84	22	..	..	..	192
11. Houses for filthy conditions	41	32	25	60	..	1	..	159
12. Houses for verminous conditions	86	25	41	93	..	1	..	246
13. Housing re-inspections	5,999	7,412	2,416	3,142	..	536	..	19,505
14. Houses let in lodgings	220	23	21	31	..	15	..	310
15. Separate dwellings within houses let in lodgings	488	33	35	23	..	23	..	602
16. Common lodging houses .. .. .	..	..	1	..	..	..	(a) 253	254
17. Canal boats .. .. .	..	..	..	..	..	..	(a) 545	545
18. Sites for tents, vans, sheds, etc. .. ..	..	..	..	5	..	..	(a) 166	183
19. Tents, vans or sheds	2	12	..	..	..	25	(a) 631	670
20. Other visits not included above	407	14,603	7,752	10,288	5	14,161	(a) 685	47,901
FOOD AND DRUGS PREMISES.								
21. Dairies .. .. .	..	..	..	..	..	..	..	521
22. Pasteurising and sterilising plants .. ..	..	..	..	..	..	..	..	237
23. Bottled Milk Shops .. .. .	..	..	..	..	..	..	..	17
24. Railway stations .. .. .	..	..	..	..	..	..	..	..
25. Ice-cream	98	307	200	154	..	..	..	759
26. Fried Fish	83	261	56	186	4	..	..	590
27. Pickles and sauces	2	6	20	4	6	..	..	38
28. Sausages and pork products	16	92	47	43	9	..	..	207
29. Other registered premises	27	2	31	14	1	..	..	75
30. Bakehouses	105	87	47	114	17	..	..	372
31. Private slaughterhouses .. .. .	..	..	..	..	..	..	1,318	1,318
32. Butchers	128	237	106	167	..	..	45	683
33. Provision merchants	36	41	45	239	1	..	79	441
34. Restaurants, cafes, kitchens	2	7	64	7	26	..	641	747
35. Markets .. .. .	..	..	..	..	..	..	288	288
36. Other food premises	245	155	833	277	15	..	31	1,556
37. Food manufacturing premises .. .. .	..	..	..	..	..	..	14	14
38. Visits for enquiry	63	44	1,278	20	8	..	247	1,660
39. No access visits .. .. .	..	..	..	..	..	..	22	22
40. Attendance at Court .. .. .	..	..	..	..	..	..	25	25
41. Visits re adulterated samples .. .. .	..	..	..	..	..	..	51	51
42. Notices served under Reg. 20 M. & D. Regs. ..	..	..	..	..	..	..	..	..
PHARMACY AND POISONS ACT.								
Visits paid to premises:—								
43. New applicants for listing .. .. .	..	..	..	..	..	..	..	..
44. Routine inspection .. .. .	..	..	..	..	..	..	22	22
45. Unlisted premises .. .. .	..	..	..	..	..	..	1	1
46. Other visits .. .. .	..	..	..	..	..	..	8	8
47. No access visits .. .. .	..	..	..	..	..	..	..	..
RAG FLOCK AND OTHER FILLING MATERIALS ACT.								
Visits paid to premises:—								
48. Registration .. .. .	..	..	..	..	..	..	..	..
49. Licensing .. .. .	..	..	..	..	..	..	..	..
50. Routine inspection of Registered premises ..	..	..	..	..	..	..	11	11
51. Routine inspection of Licensed premises ..	..	..	..	..	..	..	2	2
52. Enquiries .. .. .	..	..	..	..	..	..	3	3
53. No access visits .. .. .	..	..	..	..	..	..	..	..
FERTILISERS AND FEEDING STUFFS ACT								
Visits paid to premises:—								
54. Enquiries .. .. .	..	..	..	..	..	..	3	3
55. Other visits .. .. .	..	..	..	..	..	..	..	..

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1959.—contd.

ANALYSIS OF INSPECTIONS		North Div.	South Div.	East Div.	West Div.	Facto- ries Div.	Hous- ing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
DISEASES OF ANIMALS ACTS.										
Visits paid to piggeries:—										
56.	Inspection .. .. .	..	..	..	..	..	..	..	587	587
57.	Enquiries .. .. .	..	..	..	..	..	..	..	20	20
Visits paid to farms:—										
58.	Warble Fly .. .. .	..	..	..	..	..	..	..	147	147
59.	T.B. Order—Disinfection .. .. .	..	..	..	..	..	..	..	..	..
60.	Foot and mouth disease .. .. .	..	..	..	..	..	..	..	1	1
61.	Anthrax .. .. .	..	..	..	..	..	..	..	..	..
Visits paid to:—										
62.	Whitkirk Auction Mart .. .. .	..	..	..	..	..	..	..	42	42
63.	Victoria Cattle Market .. .. .	..	..	..	..	..	..	..	..	..
64.	Poultry Market and Shows .. .. .	..	..	..	..	..	..	..	94	94
TRADES AND BUSINESSES.										
65.	Factories with mechanical power	2	8	5	..	1,007	..	..	1	1,023
66.	Factories without mechanical power	1	2	..	..	22	..	..	..	25
67.	Other premises, constructional work, etc. .. .. .	..	..	..	..	19	..	..	..	19
68.	Workplaces .. .. .	..	4	..	..	482	..	..	..	490
69.	Hairdressers	9	24	6	36	8	..	..	2	85
70.	Shops	19	22	7	13	285	..	..	6	352
71.	Outworkers .. .. .	..	..	..	..	..	..	..	2	2
72.	Offensive trades	10	12	17	10	3	..	..	..	52
73.	Visits for enquiry	1	18	9	2	751	..	..	3	784
SMOKE ABATEMENT.										
74.	Smoke observations	31	7	2	10	418	..	..	..	468
75.	Grit deposit records .. .. .	..	..	..	..	15	..	..	..	15
76.	Boiler plant .. .. .	..	..	1	9	423	..	..	..	433
77.	Visits for enquiry	1	1	1	..	2,700	..	..	..	2,703
GENERAL.										
78.	Rodent infestations	7	29	38	25	..	..	*(b) 22,951	..	23,050
79.	Visits re Pigeons	1	8	1	..	..	..	(b) 1,771	..	1,781
80.	Farms .. .. .	..	20	..	..	..	..	..	..	20
81.	Stables	11	..	..	3	..	..	..	..	14
82.	Pig-styes	11	176	38	311	..	..	..	..	536
83.	Poultry and other animals	6	14	..	151	..	..	..	..	171
84.	Water supply	184	134	95	137	2	..	..	..	552
85.	Infirm and diseased persons .. .. .	..	..	..	2	..	..	..	..	2
86.	Watercourses and ditches	19	13	3	8	..	..	..	..	43
87.	Culverts .. .. .	..	2	..	..	..	..	..	..	2
88.	Other nuisances	5	10	49	9	..	..	..	..	73
89.	Public conveniences	54	140	150	166	..	..	..	88	598
90.	Visits for enquiry	5,637	745	143	413	24	2	..	..	6,964
91.	No access visits	1,467	1,191	654	902	95	1,020	(a) 3	8	5,340
92.	Other visits (not included in above)	286	78	89	107	50	35	..	42	687
REPAIRS AND IMPROVEMENTS.										
93.	Roofs, valley gutters, flashings, etc.	146	133	200	128	..	..	..	..	607
94.	Chimney stacks, flues, pots, etc.	22	37	68	36	..	..	..	..	163
95.	Eaves spouts	73	89	92	79	..	..	..	..	333
96.	Fallpipes	94	75	129	62	2	..	..	..	362
97.	Walls, brickwork, pointing	82	57	56	57	..	..	..	..	252
98.	Damp-proof courses provided	13	2	2	4	..	..	..	..	21
99.	Dampness otherwise remedied	14	40	25	25	..	..	..	..	104
100.	Wallplaster	29	43	119	24	..	..	..	..	215
101.	Ceilings	19	16	84	10	..	..	..	..	129
102.	Floors	22	22	92	18	..	..	..	..	154
103.	Windows, frames, cords, etc.	38	83	58	36	..	..	..	..	215
104.	Doors, door-frames	13	24	27	25	..	..	..	..	89
105.	Ovens, fire-ranges, grates, etc.	19	34	39	24	..	..	..	..	116
106.	Washing boilers, setpots, etc.	1	1	2	..	..	..	..	..	4
107.	Sinks, lavatory basins, etc.	21	17	84	21	..	..	..	..	143
108.	Waste pipes	56	34	97	29	..	..	..	..	216
109.	Water supply provided	5	11	36	1	..	..	..	..	53

* Includes 12,113 for sewer baiting

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1959.—contd.

ANALYSIS OF WORK DONE	North Div.	South Div.	East Div.	West Div.	Facto- ries Div.	Hous- ing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
REPAIRS AND IMPROVEMENTS (continued)									
10. Food stores	2	2	69	..	..	..	..	..	73
11. Pavings, yards and passages	14	28	10	16	..	..	..	..	68
12. Repairs to water closets	84	178	65	88	..	..	..	..	415
13. New water closets provided	16	11	79	11	..	..	..	..	117
14. New pail closets provided .. .. .	..	..	..	..	..	..	..	..	..
15. Trough closets abolished .. .. .	..	..	..	..	..	..	..	..	..
16. Privy closets abolished .. .. .	..	2	..	2	..	..	..	..	4
17. Pail closets abolished .. .. .	..	..	..	..	..	..	..	..	..
18. Dustbins provided	14	14	..	3	..	..	..	..	31
19. Ashpits repaired .. .. .	..	2	..	..	..	..	..	..	2
20. Sunken ashpits abolished .. .. .	..	1	..	..	..	..	..	..	1
21. Other ashpits abolished .. .. .	..	7	..	4	..	..	..	..	11
22. Other repairs to houses	32	20	39	90	..	..	..	..	181
23. Verminous houses disinfested	11	9	..	18	..	..	..	..	38
24. Dirty houses cleansed	5	10	1	22	..	..	..	..	38
25. Closets cleansed or limewashed	4	5	1	..	..	..	..	..	10
26. Underground dwellings made fit or closed	1	..	..	..	..	..	..	..	1
27. Other improvements to common lodging- houses .. .. .	..	..	..	..	..	..	..	..	..
28. Other improvements to houses let in lodgings	1	..	..	..	..	..	..	..	1
29. Improvements to canal boats .. .. .	..	..	..	..	..	..	..	..	..
30. Improvements to caravan sites .. .. .	..	..	..	..	..	..	..	..	..
FOOD PREMISES.									
31. Walls, ceilings, floors, etc., repaired	14	27	13	26	1	..	..	2	83
32. Walls, ceilings, floors, etc., cleansed	11	117	97	126	3	..	..	2	356
33. Ventilation provided or improved	12	38	131	27	2	..	..	..	210
34. Articles, apparatus, clothing cleansed	6	2	48	38	..	..	..	1	95
35. Washing facilities provided	22	48	104	56	1	..	..	..	231
36. Washing facilities maintained	11	3	40	621	2	..	..	..	677
37. Other improvements	15	45	88	34	3	..	..	9	194
TRADES AND BUSINESSES.									
FACTORIES.									
38. Rooms cleansed .. .. .	..	..	..	..	2	..	..	..	2
39. Rooms ventilated .. .. .	..	..	..	..	..	..	..	..	..
40. Reasonable temperature secured .. .. .	..	..	..	..	..	..	..	..	..
41. Overcrowding abated .. .. .	..	..	..	..	..	..	..	..	..
42. Floors drained .. .. .	..	..	..	..	..	..	..	..	..
43. Insufficient conveniences remedied .. .. .	..	..	..	..	2	..	..	..	2
44. Unsuitable/defective conveniences remedied .. .. .	..	..	..	..	59	..	..	..	59
45. Conveniences made separate for sexes .. .. .	..	..	..	..	10	..	..	..	10
46. Other offences remedied .. .. .	..	..	..	..	40	..	..	..	40
47. Absence of abstract noted .. .. .	..	..	..	..	2	..	..	..	2
WORKPLACES.									
48. Rooms ventilated .. .. .	..	..	..	..	..	..	..	..	..
49. Overcrowding abated .. .. .	..	..	..	..	..	..	..	..	..
50. Rooms cleansed .. .. .	..	..	..	..	1	..	..	..	1
51. Sufficient conveniences provided .. .. .	..	..	..	..	..	..	..	..	..
52. Other defects remedied .. .. .	..	..	..	..	13	..	..	..	13
SHOPS.									
53. Ventilated .. .. .	..	..	..	5	..	..	..	..	5
54. Reasonable temperature secured .. .. .	..	..	..	..	..	..	..	..	..
55. Sufficient conveniences provided .. .. .	..	..	..	..	..	..	..	..	..
56. Lighting provided .. .. .	..	..	..	..	..	..	..	..	..
57. Washing facilities provided .. .. .	..	..	..	7	..	..	..	..	7
58. Meals facilities provided .. .. .	..	..	..	..	..	..	..	..	..
59. Other defects remedied .. .. .	..	2	..	5	10	..	..	..	17
HAIRDRESSERS.									
60. Byelaw offences remedied .. .. .	..	..	..	..	..	..	..	..	..
OFFENSIVE TRADES.									
61. Byelaw offences remedied .. .. .	..	..	..	..	..	..	..	..	..
62. Other improvements secured .. .. .	..	12	..	..	..	..	..	..	12

ANALYSIS OF WORK DONE		North Div.	South Div.	East Div.	West Div.	Facto- ries Div.	Hous- ing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
SMOKE ABATEMENT.										
163.	Furnaces newly provided .. ..	..	..	..	..	10	..	..	..	10
164.	Furnaces altered, repaired or renewed .. ..	..	..	..	..	4	..	..	..	4
165.	Chimneys newly erected .. ..	..	..	..	..	2	..	..	..	2
166.	Chimneys extended or improved .. ..	..	..	..	..	4	..	..	..	4
167.	Firms adopting smokeless fuel .. ..	..	..	..	..	10	..	..	..	10
GENERAL.										
168.	Rodents caught, killed or poisoned .. ..	..	..	..	..	..	..	(incl. 74 rabbits)	..	1,851
169.	Premises cleared of rodents	2	..	..	..	..	..	(b) 1,851	..	416
170.	Premises rendered rodent-proof .. ..	..	..	..	..	..	..	(b) 414	..	40
171.	Pigeons killed .. ..	..	..	..	..	..	..	(b) 40	..	2,527
172.	Farm improvements .. ..	..	..	..	..	..	..	(b) 2,527	..	..
173.	Watercourses cleansed	1	..	..	2	..	..	..	..	3
174.	Culverts cleansed or maintained .. ..	..	..	..	1	..	..	..	..	1
175.	Poultry-house improvements .. ..	..	..	..	..	..	..	..	..	..
176.	Pig-stye improvements .. ..	..	9	..	..	..	..	..	..	9
177.	Offensive matter removed	10	9	..	1	1	..	..	..	21
178.	Manure removed .. ..	..	5	..	26	..	..	..	..	31
179.	Manure-steads built or repaired .. ..	..	1	..	..	..	..	..	..	1
180.	Public convenience repairs and painting .. ..	..	..	..	1	..	..	..	1	2
181.	Other nuisances abated	3	31	..	10	2	..	..	..	46
DRAINAGE.										
182.	Drains repaired	40	48	89	13	5	..	..	..	195
183.	Drains relaid	24	37	81	15	15	..	..	..	172
184.	New drains laid	6	8	60	5	2	..	..	..	81
185.	Drains cleansed	557	263	989	326	45	..	..	5	2,185
186.	Public sewers maintained	27	30	82	24	3	..	..	..	166
187.	Public sewers cleansed	229	203	360	218	6	..	..	2	1,018
188.	Ball and water tests	17	25	117	17	3	..	..	..	179
189.	Other tests	666	264	2,200	477	83	..	..	1	3,691
190.	Gullies renewed or provided	7	14	23	15	5	..	..	..	64
191.	Soilpipes and ventilating pipes	18	17	17	17	2	..	..	..	71
192.	Inspection Chambers	29	10	20	15	1	..	..	..	75
193.	Cesspools repaired or provided .. ..	..	..	..	1	..	..	..	..	1
194.	Cesspools emptied .. ..	..	..	..	5	..	..	..	..	5
195.	Cesspools abolished	1	..	..	1	..	..	..	..	2
SAMPLES TAKEN										
By Food and Drugs Inspectors:—										
196.	Milk—Chemical analysis .. ..	..	..	..	..	..	..	..	2,512	2,512
197.	Milk—Bacteriological examination .. ..	..	..	..	..	..	..	..	1,126	1,126
198.	Milk—Biological examination .. ..	..	..	..	..	..	..	..	94	94
199.	Food and Drugs—Chemical analysis .. ..	..	..	..	..	..	..	..	697	697
Food and Drugs—										
200.	Bacteriological examination .. ..	..	..	..	..	..	..	..	50	50
201.	Ice-Cream—Chemical analysis .. ..	..	..	..	..	..	..	..	9	9
202.	Ice-Cream—Bacteriological examination .. ..	..	..	..	..	..	..	..	47	47
Fertilisers and Feeding stuffs—										
203.	Chemical analysis .. ..	..	..	..	..	..	..	..	13	13
204.	Rag Flock, etc.—Chemical analysis .. ..	..	..	..	..	..	..	..	4	4
Specimens submitted to P. H. Lab.										
205.	for examination .. ..	..	..	..	..	..	..	..	..	..
By Meat and Other Foods Inspectors:—										
206.	Food—Chemical analysis .. ..	..	..	..	..	..	..	..	2	2
207.	Food—Bacteriological examination .. ..	..	..	..	..	..	..	..	22	22
208.	Shellfish—Bacteriological examination .. ..	..	..	..	..	..	..	..	3	3

PREVENTION OF ATMOSPHERIC POLLUTION

BY

J. H. WYATT,

Deputy Chief Public Health Inspector

Routine investigations of atmospheric pollution continued throughout 1959 with the aid of instruments situated at stations in various parts of the city. The siting of these stations is indicated on the map opposite page 212.

There are eight stations which are equipped with a standard deposit gauge and a lead peroxide instrument for the measurement of sulphur pollution of the air. These are at Hunslet, Headingley, Temple Newsam, Market Buildings, Armley Park, St. James's Hospital, Burley Park and Roundhay Hall. They are placed, so far as is possible, to cover the whole area of the city, and to give a representative picture of the level of pollution in various parts of the city.

In addition to these eight stations the Department has, at five sites, smoke filter and volumetric sulphur dioxide measuring instruments. These are :—

- (i) The City Analyst's Laboratory, 12, Market Buildings, Leeds, 1.
- (ii) The Department of Preventive Medicine and Public Health of Leeds University, 32, Hyde Terrace, Leeds, 2.
- (iii) The Day Nursery, Blenheim Lodge, Blackman Lane, Leeds, 2.
- (iv) The Y.W.C.A. Hostel, Lovell Street, Leeds, 7.
- (v) The Maternity and Child Welfare Clinic, Park Square, Leeds, 1.

The station at the City Analyst's Laboratory has operated for many years, but the other four instruments were installed in August, 1957, at the request of the Fuel Research Station of the Department of Scientific and Industrial Research, in order to obtain some record of the effect of making Smoke Control Orders. These four stations are all situated in the large Central Smoke Control Area. This Central Smoke Control Area will, it is hoped, become operative in

1962 and the five years of records which will then have been obtained will be compared with those produced after the coming into operation of the Order. It is hoped that a considerable reduction in the pollution of the atmosphere will be recorded.

In addition to the above the Central Electricity Generating Board has eight stations sited so as to monitor emissions from Skelton Grange Power Stations. Four of these stations have deposit gauges and lead peroxide instruments, the other four stations have lead peroxide instruments only. The Central Electricity Generating Board also had seven stations intended to measure discharges from the Kirkstall Power Station, but these were discontinued after 31st July, 1959.

The Department has a spare deposit gauge which is used for experimental purposes and which is at the moment sited on the roof of a foundry in the city in an attempt to measure solid deposits emitted from cupolas at that foundry. There have on occasions been complaints about emissions from this foundry.

Examination of the deposits from the deposit gauges and of the lead peroxide instruments is carried out monthly and the tests of the smoke filter and the volumetric sulphur dioxide instruments daily. All the testing is done by Mr. R. A. Dalley, City Analyst, and his staff; I must record my appreciation of the great help he has given us in this respect and for his advice and assistance in the efficient operation of the maintenance of the equipment.

The pollution figures for 1959 show an improvement over those for 1958, but this is undoubtedly due to the very fine summer in 1959.

Standard Deposit Gauges.—The table on page 227 shows the monthly deposits of solids from the atmosphere in English tons per square mile during the years 1958 and 1959. For yet another year Hunslet had the highest monthly average. In 1959 this was 31.82 tons per square mile. The station showing the lowest monthly average was Roundhay, which in 1959 recorded 10.18 tons per square mile, as compared with Temple Newsam in 1958 at 9.86 tons per square mile. The Roundhay station has been working since June, 1958, and consistently returns low deposit figures.

The table on page 226 sets out the deposits of solids for the years 1926 to 1959 inclusive.

Estimate of Atmospheric Pollution by the Lead Peroxide Method.—The table on page 228 sets out the results of the examination of the lead peroxide instruments during the years 1958 and 1959. The station showing the highest monthly average of atmospheric sulphur pollution was Market Buildings with 3·87 milligrammes of SO_3 per 100 square centimetres compared with an average of 4·10 milligrammes at Hunslet in 1958. The station with the lowest monthly average was again Roundhay with 1·58 milligrammes of SO_3 as compared with 1·78 milligrammes for the seven months of 1958.

The monthly average of SO_3 in milligrammes per day for all the stations in the city is illustrated graphically on page 229. The curves of the graphs for 1958 and 1959 are very similar, but the variation caused by the fine summer can be seen in the graph for 1959. The graphs show the increase in sulphur contamination of the atmosphere during the months when domestic fires are commonly in use.

Concentration of Smoke and Sulphur Dioxide by the Smoke Filter and Volumetric Method.—Records from the five instruments operated by the Council are set out in the two tables on pages 224 and 225. The special smoke filter at Market Buildings which was operated on behalf of the Medical Research Council to assist them in their study of the relation between air pollution and mortality was closed on 24th February, 1959. The examination of the filter papers from this apparatus was carried out in London and no records of the results are available.

Clean Air Act, 1956.—*Prohibition of Dark Smoke from Chimneys.*—The legislation with regard to this is contained in Sections 1 and 2 of The Clean Air Act, 1956, and in Regulations made by the Minister under the provisions of Section 1. There are two sets of Regulations which control the emission of dark smoke from chimneys, namely, the Dark Smoke (Permitted Periods) Regulations, 1958, which specify the periods during which dark or black smoke may be emitted from chimneys of buildings, and the Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958, which regulate the periods during which dark or black smoke may be emitted from the chimneys of vessels.

Section 2 of the Act allows temporary exemptions to be given in the case of buildings where it has not been found practicable to alter or equip the buildings so as to conform to the provisions of Section I of the Act with regard to smoke emissions. Two applications for temporary exemption have been received. The first concerned a steam tug moored on the river and used to provide steam power to a shore installation. Exemption was granted for this tug for a limited period until new boiler plant could be installed at the premises. The use of the tug has now ceased, but during the period of exemption the tug was not observed to send out smoke in excessive quantities. In the second case, notices were served upon the occupiers of premises used for the re-heating of metal and for sheet metal pressing, for contravention of the provisions of the Dark Smoke (Permitted Periods) Regulations. Following the service of these notices the firm made application for temporary exemption in respect of eight Hermanson coal-fired producer gas furnaces for a limited period until they could adapt these furnaces for more efficient operation. Temporary exemption was given in respect of two chimneys serving these furnaces—the exemption to expire at a date in 1960. The adaptation of the furnaces is now in hand and is likely to be completed before the expiration of the temporary exemption. The chimneys which were the subject of the exemption were noted as having exceptionally heavy constant smoke emissions. The adaptations which have already been done have resulted in considerable improvement.

In my report for 1958 I mentioned that the Health Committee had exempted the chimney of the boiler house of the Engineering Department of the University of Leeds from the provisions of Sections 1, 5 and 16 of the Clean Air Act, 1956. This exemption was given under Section 21 of the Act for research upon air pollution. It is granted for periods of twelve months at a time, subject to the condition that a register be kept of all periods when investigations or research are being carried out, and that the register be kept available at all reasonable times for inspection by persons authorised by the City Council. This exemption has been renewed for a further period of twelve months.

During 1959, 468 smoke observations were taken and 52 notices were served for contravention of the Dark Smoke (Permitted Periods) Regulations. In addition a large number of visits were paid to boiler plant in order to give advice upon methods to be adopted to comply with the Regulations.

A number of complaints about smoke emissions from the chimney of the Middleton Colliery were received in 1959. Despite the service of 14 notices and frequent visits to the premises, no improvement was noticed. Information was laid against the National Coal Board and the case commenced before the Stipendiary Magistrate on 24th September, 1959. The Coal Board pleaded not guilty and the Corporation's case was heard. The case was adjourned several times for various reasons, and eventually the Coal Board's solicitors wrote to the Corporation to suggest that the proceedings were resulting in considerable expenditure of time, trouble and money, and to ask whether the Corporation would be prepared to apply for leave to withdraw the prosecution. After protracted negotiations and with the approval of the Health Committee, it was agreed that the case be withdrawn upon condition that a declaration embodying the following four points was made in open Court :—

1. The Board appreciate the action of the Corporation in applying for leave to withdraw the prosecution.
2. The Board accept unreservedly the evidence given by the Corporation's Inspectors as to the duration and density of emissions of smoke from the Colliery chimney. The Board make no admission about the position in law resulting from such emissions. It is agreed that in recent months the position has improved considerably as a result of action taken at the colliery.
3. It is the Board's intention to complete the scheme of electrification at the colliery in August of this year and the necessary preparatory work to this end has already been started.
4. The Board make no application for costs.

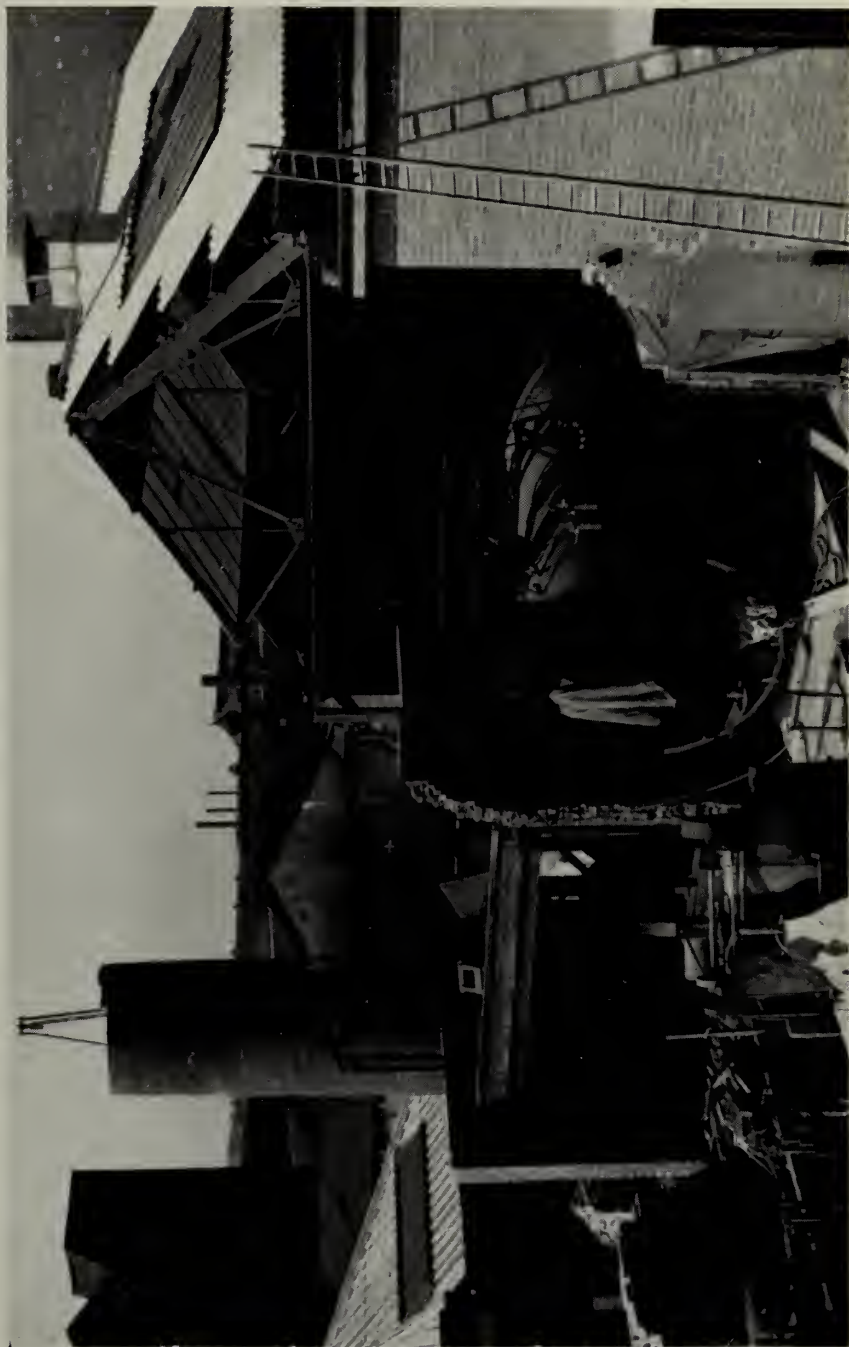
This declaration was made and the prosecution withdrawn. Electrification of the colliery is proceeding.

The Installation of New Furnaces and Prior Approval of Furnaces.—Section 3 of The Clean Air Act, 1956, requires that any person who installs a new furnace must notify the Local Authority. The Section also provides that any new furnaces which are installed must be capable of operating continuously without emitting smoke while burning fuel of the type for which they were designed. The Section further provides for prior approval of any new furnace by the Local Authority. During 1959, 67 notifications were received of the installation of new furnaces. There were 7 applications for prior approval of boiler plant ; 6 of these applications were approved subject to conditions, and the seventh was withdrawn by the applicant because he was not prepared to give the full details required. An example of the type of plant for which prior approval has been given is shown in the photograph opposite.

Control of Grit and Dust from Furnaces.—This is dealt with by Sections 5, 6, 7, 8 and 9 of the Clean Air Act, 1956. The Act requires that the occupier of any building in which a furnace is installed, and which burns solid fuel or solid waste, must use any practical means there may be of minimising the emissions of grit and dust. The Act also provides that if a furnace is designed to burn pulverised fuel or to burn solid fuel or solid waste at a rate of 1 ton per hour or more, it must be provided with apparatus for arresting grit and dust which has been approved by the Local Authority and which is properly maintained and used.

Two new appliances burning solid fuel at a rate of more than 1 ton an hour have been installed during the year. The appliances are two hot blast cupolas with a very high output. Such cupolas are controlled by H.M. Inspector, Alkali, etc. Works, but both have been required to be fitted with a primary cyclone unit discharging to a chimney 120 ft. in height.

Several complaints have been received about emissions of grit and dust from chimneys in the city and action of various sorts has been taken to deal with these complaints. The representations which have been made in these cases appear to have had the desired effects. In connection with these complaints fifteen grit deposit records were taken.



PRIOR APPROVAL OF FURNACES AND CONTROL OF CHIMNEY HEIGHTS

A new coal-fired 'Economic' Boiler to be fitted with mechanical stoker. A new 60-ft. chimney was proposed for this originally, but a 120 ft. chimney was required under Section 10 of the Clean Air Act, 1956.



Heights of Chimneys.—Section 10 of The Clean Air Act gives the Local Authority power to control heights of chimneys from certain types of new buildings. In Leeds this power is supplemented by the provisions of Section 120 of the Leeds Corporation Act, 1956, which includes all types of new buildings where the height of the chimney is likely to be insufficient to prevent nuisance. This power is linked with the submission of new building plans.

In 1959, 88 plans on which new chimneys appeared were examined and commented upon. In many cases the heights of chimneys shown had already been the subject of discussion between Inspectors of the Department and the architect concerned, but in thirteen cases no such discussions had taken place and the chimneys were required to be raised in height. The decision as to the height required is taken in accordance with the provisions of the Section of the Act concerned, that is, regard is paid to :—

- (a) the purpose of the chimney,
- (b) the position and description of buildings nearby,
- (c) the levels of the neighbouring ground,
- (d) any other matters requiring consideration in the circumstances.

The Department believes that the emission of sulphur fumes is one of the other matters mentioned in (d) which require consideration in this connection. The quantity of sulphur dioxide emitted over a period from large boiler plants can be very considerable and many of the harmful effects of smoke pollution are caused by acid gases such as these. In assessing chimney heights, therefore, particular attention is paid to the ground level concentration of sulphur dioxide which would be produced by emissions from a particular stack, and chimney heights are required which would not give an unreasonably high concentration of such gases at ground level. We use for this purpose the cold gas formula given in an appendix to the Report of the Committee on Air Pollution, and we take as a reasonable concentration of sulphur dioxide at ground level 0.3 p.p.m. Another matter to which we pay particular attention is the possibility of nuisance from grit and dust emissions. The question of chimney heights is a very difficult one and often involves a conflict between the architectural appearance of the building and the requirements of the Health Department which is, of course, concerned solely with the effect of chimney emissions upon health.

Smoke Control Areas.—Section 11 of The Clean Air Act, 1956, gives local authorities power to establish Smoke Control Areas within their districts.

In January, 1959, the Minister of Housing and Local Government issued a Circular No. 5/59 in which he asked that Councils in "black areas" should consider their domestic smoke problem as a whole and decide on the Smoke Control Orders that are needed, in what order of priority they should be made, and how many years it is likely to take to finish the job. Councils in "black areas" were requested then to prepare a phased programme for establishing Smoke Control Areas over the next 5 years and invited to inform the Minister by 30th June, 1959, of their conclusions.

The Minister asked that the information should be furnished in a standard form. A copy of the programme approved by the City Council and submitted to the Minister is set out opposite.

It was suggested that in 1959 Orders should be made to cover 1,527 acres including 15,718 premises. Owing to shortage of staff, this programme has not been realised and up to the end of 1959 seven areas only have been considered for the making of Smoke Control Areas. The Orders in respect of two of these Areas have been confirmed. The other five areas, including the very large Central Smoke Control Area, are still under consideration.

Roman Avenue Smoke Control Area.—The Roman Avenue Housing Estate of flats and houses was originally constructed to be a smokeless estate and the tenancy agreement for houses and flats required that smokeless fuels only should be burned.

When the Clean Air Act came into operation it was considered that this tenancy agreement should be reinforced by a Smoke Control Order in respect of this estate. Confirmation of the Order was received from the Minister on 31st March, 1959. The Order is known as The City of Leeds No. 1 (Roman Avenue) Smoke Control Order, 1958, and it came into operation on 1st October, 1959. Observations taken since the coming-into-operation of this Order show that it is being observed faithfully by the majority of tenants but warnings have been given to the occupants of one of the houses that they should use authorised fuels only.

SUMMARY

Name of Local Authority :—LEEDS COUNTY BOROUGH

Approximate number of premises in the Local Authority area :—101,246.

Acreage of Local Authority area :—40,613·5.

Number of premises and acreage of land in smokeless zones and smoke control areas

(1)	(2) Covered by Orders made up to 31.12.58	(3) Estimated additions covered by Orders to be made during 1959	(4) Estimated additions covered by Orders to be made during 1960	(5) Estimated additions covered by Orders to be made during 1961	(6) Estimated additions covered by Orders to be made during 1962	(7) Estimated additions covered by Orders to be made during 1963	(8) Final Ob- jective (the total num- bers it is intended ultimately to cover)	(9) Target year for completion of programme
Premises	162	15,718	7,613	11,224	8,233	4,142	165,456	
Dwellings	162	9,934	7,556	11,132	8,181	4,127	151,105	1980
Acres	20	1,527	606	985	629	224	8,921	

NOTE :—" Premises " should be read as including subdivisions of buildings, e.g. separate flats in a block of flats or separate suite of offices in a block of offices. The list of hereditaments for rating purposes, other than land without buildings, may be useful in this connection. The total of premises should include the number of dwellings shown in the line below.

Alwoodley Smoke Control Area.—The City of Leeds No. 3 (Alwoodley) Smoke Control Order, 1959, was confirmed by the Minister on 11th November, 1959. Its operation date is to be 1st June, 1960. The Order refers to 33 acres of open land—building had not commenced by the end of the year but the area was scheduled for the construction of some 150 houses.

Central Smoke Control Area.—The detailed survey of this area, which was commenced in 1958 following the approval in principle by the Minister of Housing and Local Government, was completed during the early months of 1959.

In March, 1959, The City of Leeds No. 2 (Central Area) Smoke Control Order, 1959, was submitted to the Minister for confirmation. The Order as originally drafted did not include any exemptions for boiler plant; the only exemptions were in respect of domestic properties in proposed Clearance Areas or Redevelopment Areas and of incinerators for disposal of waste material.

A number of objections were received, all, save one, from the occupiers of commercial or industrial premises. Before these objections could be considered, the Minister issued the Smoke Control Areas (Exempted Fireplaces) Order, 1959. This Order exempted, upon certain conditions, three classes of fireplaces from the provisions of any Smoke Control Order. In particular it exempted fireplaces other than fireplaces fired by pulverised fuel constructed on or after 31st December, 1956, and equipped with mechanical stokers or adapted on or after that date for use with such stokers. Issued with this Order was Circular No. 44/59 which referred particularly to mechanically fired furnaces installed before 31st December, 1956. The Circular asked local authorities to arrange in proposed Smoke Control Areas for the inspection of mechanically fired furnaces not exempted by the Order and to consider whether such furnaces were capable of a reasonably smokeless burning when using suitable coal and when properly maintained and operated. It further suggested that all coal burning furnaces fired by mechanical stokers which are capable of working as smokelessly in Smoke Control Areas as those exempted by the Exempted Fireplaces Order of 1959 should also be exempted by local authorities upon similar conditions.

In the light of the Order and the Circular, the City Council again considered mechanically fired plant within the Central Area and agreed to exempt all types of mechanically fired coal-burning furnaces from the provisions of the Central Smoke Control Order. Following this all objections to the Order were withdrawn but confirmation of the Order had not been received by the end of 1959.

The Abatement of Smoke Nuisances.—Section 16 of the Clean Air Act provides that smoke, other than smoke from the chimney of a private dwelling or dark smoke emitted from the chimney of a building, shall, if it is a nuisance to the inhabitants of the neighbourhood, be a statutory nuisance under the provisions of the Public Health Act, 1936. This Section is designed to deal with smoke emissions which do not contravene other provisions of the Clean Air Act.

Few complaints have been received which could be dealt with under this Section. In general it is used to deal with the burning of refuse on open land and two complaints only about this have come in during the year.

Alkali, etc. Works.—Two complaints only have been received during the year of smoke and fume emissions from premises controlled under the Clean Air Act, 1956, by H.M. Inspector of Alkali, etc. Works. The first of these complaints referred to emissions from the chimney of a lead works and the Alkali Inspector is at present dealing with the matter.

The second complaint referred to nuisance from grit from two large hot blast cupolas recently installed at a factory. The Alkali Inspector in this case has required the provision of primary cyclone arresters and the discharge of the effluent gases into a chimney stack 120 ft. in height. This work has not yet been carried out.

The Department has close liaison with the Alkali Inspectorate from whom it has received considerable help.

Colliery Spoilbanks.—The nuisance which has been previously recorded of smoke and fumes from a burning colliery spoilbank in the southern part of the city continues. Some improvements have been secured by approaches to the owners of the spoilbank but it has been found impossible to completely control the fire in this case.

Control of Smoke from Railway Engines.—Section 1 of the Clean Air Act and the Dark Smoke (Permitted Periods) Regulations apply to railway engines as if they were buildings. No action has been taken under this Section during the year but there has been a noticeable improvement in the amount of smoke from such engines in the city centre during the year.

On 16th February, 1959, Circular No. 13/59 was issued by the Minister of Housing and Local Government. Amongst other things this dealt with the position of British Railways with regard to Smoke Control Areas. It suggested that Authorities proposing to make Smoke Control Orders which might be affected by railway smoke should approach the British Transport Commission as to the possibility of the introduction of diesel and electric locomotives and trains. This was done and British Railways replied that their future programme envisaged the introduction of main line diesel locomotives and ultimately a certain amount of electrification. The reply also indicated that diesel rail-car service on local routes had been progressively introduced and that diesel shunting locomotives were now being used at the various yards in the city. It was hoped that the smoke from the railways would be progressively reduced.

Control of Smoke from Vessels.—Section 1 of the Clean Air Act and the Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958, apply to vessels as if they were buildings. The number of steam-driven tug boats on the river is rapidly falling and no contraventions of the Act or the Regulations have been observed during the year.

Building Byelaws.—The City Council's Building Byelaws now require the provision in new buildings of arrangements for heating or cooking calculated to prevent the emission of smoke. All plans of new buildings are now approved subject to the provision of appliances which are designed to burn approved fuels.

General.—The work of the public health inspectors on smoke abatement during 1959 was as follows :—

Smoke observations	468
Grit deposit records	15
Visits to boiler plants	433
Visits for other enquiries	2,703



CLEAN AIR EXHIBITION, 16th-18th APRIL, 1959

Photograph of Leeds Corporation's Stand



The reduction in the number of visits for enquiry is due to the completion of the survey for the proposed Central Smoke Control Area.

Clean Air Exhibition.—During the seven months ending April, 1959, the West Riding Clean Air Advisory Council sponsored exhibitions in 17 centres throughout the West Riding. The first of these exhibitions was held in Wakefield in September, 1958, and the series culminated in an exhibition held in the Corn Exchange, Leeds, from 16th to 18th April, 1959.

The exhibitions were intended to foster interest in smoke abatement and, in particular, in the establishment of Smoke Control Areas in the region. The Leeds exhibition, which was opened by the Lord Mayor, was well attended and did much to publicise the prospective Smoke Control Areas in the city and to highlight the damage and difficulties caused by smoke in the atmosphere. A photograph of the Corporation's stand is reproduced opposite page 222.

SMOKE FILTER APPARATUS.
Concentration of Smoke in Milligrammes per 100 cubic metres.

1959	MONTHLY AVERAGE					HIGHEST DAILY AVERAGE				
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.
January ..	76	80	87	80	106	493	280	358	303	297
February ..	48	52	52	43	47	117	133	160	118	112
March ..	37	45	46	39	41	67	76	72	60	66
April ..	32	34	34	31	32	62	60	66	58	60
May ..	13	12	13	11	13	30	29	33	29	31
June ..	11	8	10	9	10	22	16	18	17	16
July ..	12	9	10	10	10	19	15	17	16	16
August ..	10	8	8	9	9	26	18	22	24	21
September	22	19	19	19	21	99	77	81	65	91
October ..	40	36	34	32	33	129	88	107	101	76
November..	61	59	56	53	59	189	232	180	191	230
December ..	44	49	41	46	41	108	91	116	102	106

SULPHUR DIOXIDE VOLUMETRIC APPARATUS.
Concentration of Sulphur Dioxide in parts per 100 Million of Air.

1959	MONTHLY AVERAGE				HIGHEST DAILY AVERAGE					
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.
January ..	29	26	29	29	30	134	119	117	118	86
February ..	21	18	22	22	26	47	40	51	42	46
March ..	13	13	17	18	21	26	22	31	34	28
April ..	12	11	13	14	16	18	19	24	29	27
May ..	7	6	7	7	16	13	15	20	14	33
June ..	7	5	7	6	15	12	8	11	13	24
July ..	7	5	6	6	11	11	9	11	10	23
August ..	5	4	5	5	12	12	8	10	11	19
September	10	7	6	9	16	28	19	23	20	29
October ..	14	9.1	12.4	13.9	19.1	28	17	23	24	27.4
November..	22.4	14.6	15.7	20.9	28.6	67.5	35.5	60.4	48.3	47.5
December	18.8	12.6	16.7	19.2	27.2	40.1	20.4	26.6	27.7	41.6

DEPOSIT GAUGES RECORDS, 1926-1959.
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year	STATIONS								
	Headingley	City Centre	York Road	Hunslet	Temple- newsam	Armley Park	St. James's Hospital	Burley Park	Roundhay
1926..	98.02	307.7	*288.1	362.8
1927..	*133.5	354.5	391.9	501.2
1928..	141.9	349.5	319.2	304.3	† 61.2
1929..	*108.4	321.0	302.6	305.4	† 80.4
1930..	123.9	344.3	290.5	200.5	101.8
1931..	126.5	336.2	*266.9	268.5	109.3
1932..	105.8	320.7	264.7	255.6	87.5
1933..	107.86	305.0	277.83	*276.32	* 81.59
1934..	124.28	341.7	284.74	294.49	86.24
1935..	*131.02	358.88	321.25	*317.55	†108.67
1936..	136.05	381.40	301.89	200.13	*118.20
1937..	135.93	*331.53	325.35	301.71	*123.39
1938..	*119.80	359.51	289.56	*231.39	133.37
1939..	155.32	314.96	255.15	*234.74	122.67
1940..	†180.30	†413.29	†247.36	†279.58	†243.33
1941..	†188.31	†285.51	†1247.36	*301.31	164.21
1942..	†138.21	*371.14	§129.75	*235.37	*159.03
1943..	186.93	389.03	..	271.82	171.43
1944..	175.37	374.50	..	277.14	†114.80
1945..	*151.29	*288.44	..	*262.11	*139.27
1946..	*146.50	326.26	..	*267.10	*166.64
1947..	121.94	288.76	..	*209.66	†176.12
1948..	162.78	338.02	..	213.49	149.12
1949..	181.24	411.91	..	225.68	134.68
1950..	195.36	378.57	..	206.31	164.28
1951..	*228.04	403.97	..	229.99	147.62
1952..	*135.00	356.58	..	190.43	162.32
1953..	159.28	348.84	..	183.17	126.34
1954..	184.21	354.14	..	245.99	370.85
1955..	*115.74	288.50	..	†316.83	†109.14
1956..	*129.81	287.22	..	†359.44	*120.47
1957..	125.57	264.27	..	385.63	†100.97
1958..	*115.75	265.82	..	*440.80	*140.30
1959..	134.67	243.59	..	†254.57	†98.04
				†131.86	212.94
				236.84	*189.03
					204.88
					268.70
					319.63
					195.15
					208.49
					177.16
					*272.78
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STANDARD DEPOSIT GAUGES.
MONTHLY DEPOSITS IN ENGLISH TONS PER SQUARE MILE.
YEARS 1958 AND 1959.

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STATIONS

Period	Headingley		Market Buildings		Hunslet		Temple Newsam		Armley Park		St. James's Hospital		Burley Park		† Roundhay	
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959
January	..	11·90	13·67	25·29	29·09	34·62	43·03	10·52	12·45	17·63	30·19	18·41	23·33	18·16	25·91	.. ‡
February	..	14·31	9·70	33·10	12·98	36·55	26·18	9·53	8·01	27·43	14·22	19·41	12·54	25·10	9·91	.. 6·35
March	..	9·34	13·13	19·28	25·56	63·16	48·90	5·22	9·77	23·25	29·99	28·97	21·18	12·73	37·59	.. 12·36
April	..	5·63	17·20	14·99	27·54	44·35	†	5·57	14·66	13·82	28·62	11·86	20·15	14·52	23·32	.. 15·07
May	..	13·27	6·85	21·86	15·06	52·01	†	12·55	7·57	23·52	15·92	19·45	†	23·25	11·72	.. 7·97
June	..	10·35	9·56	13·31	19·33	36·45	†	†	13·00	19·87	15·35	14·99	15·04	17·09	20·54	15·37 9·53
July	..	9·84	8·87	22·84	16·25	44·60	46·78	10·39	†	17·00	13·38	15·05	10·13	†	17·67	10·50 7·51
August	..	10·60	3·42	18·32	6·31	†	†	12·70	5·16	14·27	5·34	13·64	5·19	14·56	5·17	7·87 4·09
September	..	†	7·29	19·01	10·80	36·70	22·25	†	11·86	24·53	17·24	22·86	17·19	19·01	23·14	10·10 10·76
October	..	6·34	14·82	19·88	27·51	19·61	25·23	8·29	17·82	8·31	21·81	9·25	18·02	11·78	31·45	6·22 11·45
November	..	10·14	14·86	19·58	26·39	24·74	21·18	6·78	16·54	22·14	21·36	14·91	22·84	17·14	25·28	8·01 13·01
December	..	14·03	15·30	38·36	26·77	48·01	21·02	17·09	15·02	38·19	23·42	24·14	23·42	31·54	30·27	16·80 13·83
Total Deposit for year	..	115·75	134·67	265·82	243·59	440·80	254·57	98·64	131·86	249·96	236·84	212·94	189·03	204·88	261·97	74·87 111·93
Monthly average	..	10·52	11·22	22·15	20·30	40·07	31·82	9·86	11·99	20·83	19·74	17·74	17·18	18·62	21·83	10·69 10·18

‡ Gauge tampered with.

† Roundhay Station operated from 1st June, 1958.

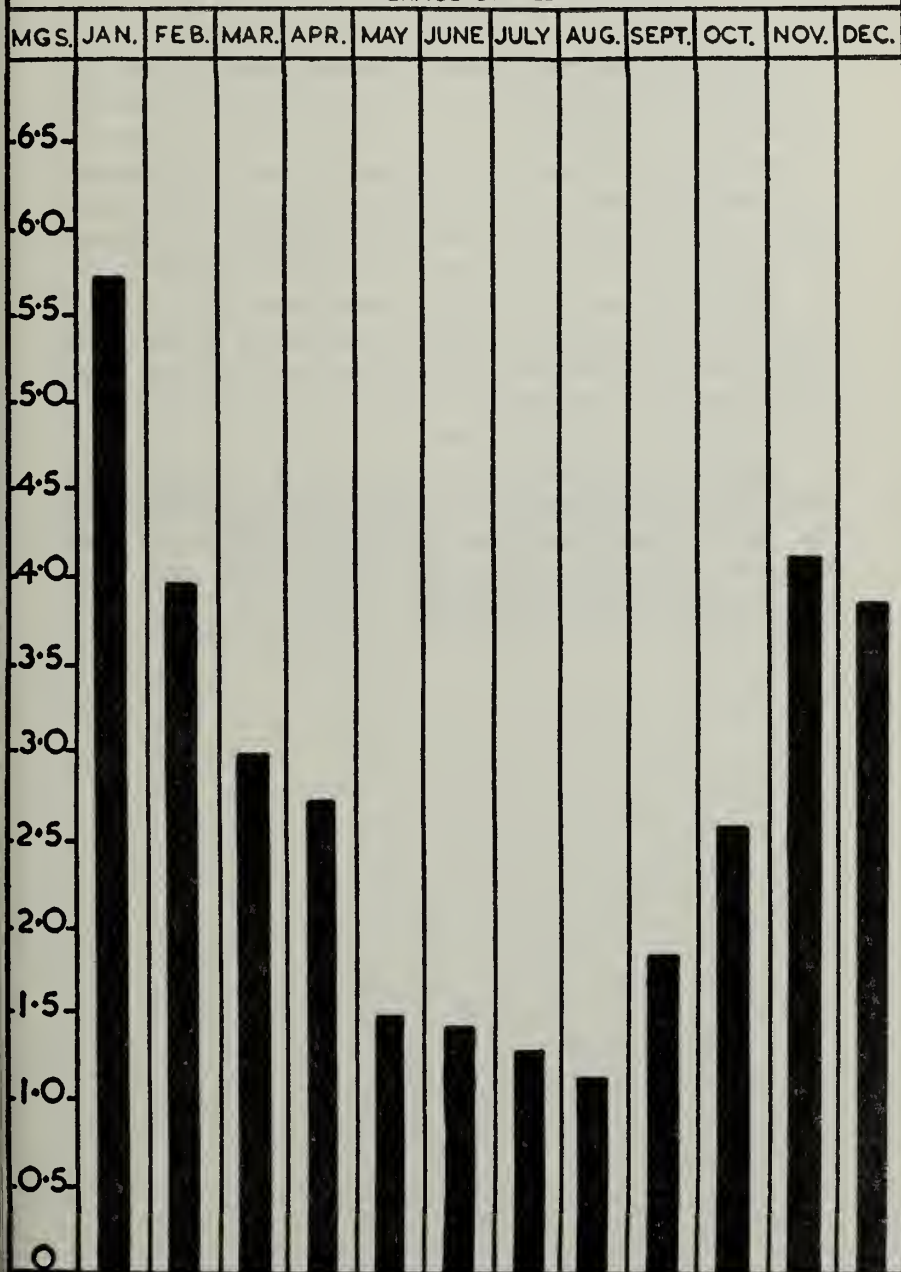
ESTIMATION OF ATMOSPHERIC SULPHUR POLLUTION BY LEAD PEROXIDE METHOD.
(Weight of SO₂ calculated per 100 square centimetres of exposed fabric in milligrammes per day.)

Period	STATIONS																
	Headingley		Market Buildings		Hunslet		Temple Newsam		Armley Park		St. James's Hospital		Burley Park		†Roundhay		
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959	
January	..	4.38	4.32	6.23	7.36	6.84	8.46	6.42	6.19	4.97	4.26	5.38	6.77	4.81	5.06	..	3.08
February	..	2.86	3.46	4.87	5.46	5.44	5.14	4.45	4.17	3.40	3.61	3.80	4.11	3.63	3.85	..	1.85
March	2.80	2.98	4.12	4.23	4.54	4.04	2.30	2.63	3.35	3.14	2.82	2.54	2.56	2.72	..	1.64
April	1.76	2.17	3.46	3.78	3.60	3.70	2.50	2.53	2.22	2.56	2.63	2.80	2.48	2.41	..	1.55
May	1.86	1.12	2.70	2.33	2.94	2.24	1.47	1.07	2.02	1.36	2.21	1.54	1.82	1.13	..	0.74
June	1.11	1.13	2.18	2.03	2.28	2.22	1.16	1.49	1.61	1.07	1.47	1.53	1.39	0.85	0.81	0.67
July	1.01	1.18	1.86	1.51	2.15	1.65	1.40	1.45	1.19	1.18	1.59	1.26	1.48	1.11	0.63	0.74
August	..	1.27	0.91	2.32	1.53	2.55	1.58	1.75	1.30	1.26	0.83	1.58	1.10	0.96	0.88	0.88	0.65
September	..	1.73	1.47	2.71	3.09	2.50	2.27	2.05	1.08	1.65	1.80	1.59	1.77	0.99	1.32	1.30	1.45
October	..	2.49	2.38	4.23	3.57	4.34	2.72	1.74	2.82	2.53	2.44	2.98	2.58	2.81	2.39	3.54	1.65
November	..	3.89	3.49	6.12	6.12	6.22	4.19	4.17	3.91	3.53	4.12	4.52	4.50	1.60	3.74	2.22	2.67
December	..	3.74	3.55	5.66	5.45	5.80	3.89	5.27	3.71	3.99	4.00	4.82	3.83	4.20	3.88	3.09	2.27
Monthly Average		2.42	2.35	3.87	3.87	4.10	3.51	2.89	2.70	2.64	2.53	2.95	2.86	2.39	2.45	1.78	1.58

† Roundhay Station operated from 1st June, 1958.

SULPHUR EMISSION — 1959

AMOUNT OF SO_2 IN MILLIGRAMMES PER DAY PER 100 SQUARE CENTIMETRES
MONTHLY AVERAGE OF ALL STATIONS



PUBLIC HEALTH INSPECTORIAL STAFF

The staffing position as regards public health inspectors remained unchanged at the end of the year. The establishment remained at 57 and at the commencement of the year there were 6 vacancies.

During the year two inspectors resigned to take up appointments with other authorities and one inspector retired on reaching the age limit. Another inspector, who had been employed by the Department since 1941, retired on account of permanent ill-health.

During the year four student public health inspectors were successful in passing the qualifying examination of the Public Health Inspectors' Examination Board and were appointed public health inspectors to fill existing vacancies. Thus, at the end of the year, there were still 6 vacancies.

Training.—The training of 15 student public health inspectors under the scheme established by the City Council continued during the year. Practical training was provided in all aspects of a public health inspector's work. Theoretical training was again arranged by the Leeds College of Technology.

Report of the City Analyst

MUNICIPAL LABORATORY

BY

R. A. DALLEY, F.R.I.C.

City Analyst

The total number of samples received for analysis during 1959 was 8,676. This was 55 less than last year and it would seem that the sharp rise in the number of samples which has taken place in recent years has now levelled off.

The number of samples of milk received for chemical analysis fell by 594, but this was balanced by an increase in other types of samples, particularly foods other than milk which showed a rise of 58 per cent.

A disturbing feature during the year was the increasing evidence that intense competition and consequent price-cutting in the food industry is leading to an increased production of sub-standard foods. Sometimes these are so inferior as to infringe the food regulations and there is then no difficulty in taking action, but many more are borderline cases, particularly as regards misleading and extravagant claims, and with these action is more difficult. Generally speaking such foods are not harmful and it is more the purchaser's pocket than his health that is being protected.

Important new Regulations dealing with Colouring Matter in Food came into force on 30th June, 1959. Prior to this date some hundreds of coal-tar dyes could be used in food, many of which were suspect as regards their effect on the body. Under the new Regulations only 30 colouring matters, each of which has been very fully tested and found to be completely harmless, may be added to food. The separation and identification of these minute quantities of dyes is a complicated and lengthy procedure, made more so by the fact that to achieve the exact shade required manufacturers often mix three or more different colours. The dyes have first to be separated from the foodstuff, then from one another and finally each colour has to be separately identified.

An important development during the year was the commencement of radioactivity measurements. This work is described in more detail in the body of the report. Suffice to state here that regular monitoring (particularly of the city water) will enable information to be built up regarding existing levels and future trends of radioactivity. In addition to its present value, such data will provide valuable information for the future when it will be possible to assess its long-term effects. The information and experience gained could also be invaluable in the event of an emergency involving radioactive material.

Activities which are not represented by actual samples have included the answering of many enquiries from industrial firms and members of the public, and the giving of lectures on the work of the laboratory to a number of organisations in the city. Groups of science students and others have also visited the laboratories.

I welcome once again this opportunity of expressing to my Deputy, Mr. L. A. Perkin, and all members of the staff my sincere appreciation of their hard work and loyal support throughout the year. It is also a pleasure to express to the Supervisory Sampling Officer, Mr. H. Long, and his assistants, my thanks for their continued helpful co-operation.

The following is a summary of the analyses made during 1959 :—

Samples submitted by Public Health Department :

Food and Drug samples	.. ..	3,226
Milks for bacteriological examination	..	1,126
Ice-cream for bacteriological examination	..	47
Fertilisers and Feeding Stuffs	.. ..	13
ATMOSPHERIC POLLUTION—		
Rain Gauges	.. ..	102
Lead Peroxide Cylinders	..	96
Daily Smoke and Sulphur Dioxide determinations	.. ..	3,514
		————— 3,712
Water for radioactivity measurement	..	9
Miscellaneous samples..	.. ..	36
		————— 8,169

(Continued on next page)

Samples submitted by Other Departments :

Central Purchasing Department	..	..	13
City Architect's Department	..	..	2
City Coroner	..	..	17
Education Department	..	..	7
Police Headquarters	..	..	5
Transport Department	..	..	86
Waterworks Department	..	..	12
			<hr/> 142

Samples received from Other Sources :

Private samples	..	..	91
Leeds General Infirmary	..	..	2
Leeds Group " B " Hospital Management Committee	..	..	6
Rothwell Urban District Council	..	..	16
Wakefield Corporation	..	..	250
			<hr/> 365
			<hr/> 8,676
			<hr/>

FOOD AND DRUGS

The table on pages 247 to 251 summarises the samples taken under the Food and Drugs Act, 1955.

The percentage of samples found to be adulterated or otherwise unsatisfactory was 4·4 per cent., compared with 2·9 per cent. for 1958 and 3·7 per cent. in 1957.

The table on page 169 lists the results of summonses issued in respect of those adulterated samples concerning which legal proceedings were instituted.

MILK:—

The average composition of the 2,512 samples submitted is shown in the following table, the corresponding figures for the last two years being given for comparison.

AVERAGE COMPOSITION OF MILK

	1959	1958	1957	Minimum legal requirement
Number of Samples ..	2,512	3,106	2,922	
Non-fatty solids ..	8.72%	8.76%	8.71%	8.50%
Fat	3.70%	3.73%	3.71%	3.00%
Total solids ..	12.42%	12.49%	12.42%	11.50%

The adulteration rate of 1.8 per cent. was the same as last year.

Of the 46 unsatisfactory samples 14 contained added water, 31 were fat deficient and one contained dirt (3.5 parts per 100,000 parts of milk). The highest amount of added water found was 7.9 per cent. and the greatest fat deficiency 45 per cent.

Prosecutions were successfully instituted against two farmers in respect of the four worst watered milks.

A further 330 milks (238 in 1958) had non-fatty solids of less than 8.5 per cent. and therefore added water was suspected, but in each case the freezing point showed the deficiency to be due to natural causes (that is cows giving poor quality milk), and not to added water.

FOODS OTHER THAN MILK :—

The number of such samples has increased steadily from 135 in 1956 to 634 in the year under review. Of these 87 (13.7 per cent.) were unsatisfactory, this being the fourth successive year in which more than 10 per cent. of the food samples other than milk have proved to be unsatisfactory. This seemingly high adulteration rate is not, of course, a true indication of the quality of food and drugs on sale in Leeds since sampling is not carried out at random. Rather is it an indication of the acumen of the sampling officers in purchasing food and drugs whose composition or label appears likely to be unsatisfactory. The figure also includes complaint samples submitted by members of the public; usually, but not invariably, the complaints prove to be justified.

Details of the more interesting cases of adulteration together with comments upon a few of the genuine samples will be found in the following paragraphs.

Sausages.—Of 53 samples received during the year, 8 were reported against for having meat contents below the recognised standards of 50 per cent. for beef and 65 per cent. for pork. Proceedings were successfully instituted against three butchers whose pork sausages contained only 48, 43 and 46 per cent. meat respectively. The other five unsatisfactory samples showed only slight deficiencies.

The average meat content was 59·6 per cent. for beef sausages (24 samples), and 65·0 per cent. for pork (29 samples). Two sausages, whilst having satisfactory meat contents, offended against The Preservative Regulations, in that they contained sulphur dioxide preservative without declaration of its presence.

Canned Meat Products.—Comment has been made in previous Annual Reports regarding the steadily falling meat content of many canned meat products. In respect of one of the worst offenders (Luncheon Meat) this fall was arrested, and indeed reversed during the year. As the result of an Agreement between the Food Manufacturers Federation and the Association of Public Analysts, Luncheon Meat manufactured in this country will now have a meat content of not less than 80 per cent. Subsequently Danish and Dutch manufacturers agreed to conform to the same standard. At one time Pork Luncheon Meat was required to contain not less than 90 per cent. meat, but, with the revocation of the Meat Product Order, some imported products contained under 60 per cent.

It is expected that in the near future agreement will be reached for some other varieties of canned meat products. Stewed Steak in Gravy, for example, not infrequently contains more gravy and less meat than is desirable, and two samples were reported against on these grounds. A tin labelled as "Chopped Ham" was unsatisfactory in that it contained 83 per cent. ham and 17 per cent. of potato starch filler, whereas the description "Chopped Ham" implies an all-meat product free from starchy filler.

Canned Whole Chicken.—As the result of a complaint, several samples of this article were obtained by the Sampling Officers, 3 being reported against. All of these were described as "Chicken in Natural Juices," but analysis showed the presence of a high proportion of added water. Two tins (of the same brand) contained considerably more water than chicken. Legal proceedings were instituted against the canners who were fined £10 plus 50s. costs.

Fish Cakes.—3 samples were seriously deficient in fish. They contained 20, 21 and 27 per cent. fish respectively as compared with the legal standard of not less than 35 per cent. The maker, who had only recently started to market this article, appeared to be genuinely unaware of the Food Standards (Fish Cakes) Order. When its requirements were pointed out to him he at once increased the fish content of his product and several subsequent samples have been of good quality.

A Milk Loaf was reported against for having a misleading label. The name "Milk Loaf," together with a picture on the wrapper of milk being poured from a jug into a loaf, suggested that the product contained normal (that is full-cream) milk, whereas in fact it contained 6 per cent. of *skimmed* milk solids. The bakers concerned (a National organisation) immediately withdrew the wrapper.

A somewhat similar criticism applied to the label of an **Ice-Cream Powder** which included in the list of ingredients "dried milk solids," but omitted to mention that the milk had first been skimmed of all its fat.

Buttered Tea-cakes.—Of seven samples four were spread with pure butter, but three with margarine. Legal proceedings were successfully taken in respect of the three unsatisfactory samples.

Cream Cakes.—Six samples, variously described as Cream Crisps, Cream Doughnuts, Cream Meringues, etc., were filled with imitation cream. The 1955 Food and Drugs Act, which made it an offence to describe an article as a "cream cake" when in fact it contained imitation cream, has now been in force for four years but mis-descriptions are still common. Since the use of real cream is increasing it is more than ever desirable that the consumer should be in no doubt as to which article he is receiving.

A Chocolate Roll was 90 per cent. deficient in cocoa content, containing not more than 0.3 per cent. compared with the accepted minimum of 3.0 per cent.

Golden Raising Mixture contained only 3.5 per cent. Available Carbon Dioxide compared with the 6.0 per cent. required by the Food Standards (Baking Powder and Golden Raising Powder) Order, 1944 (41.7 per cent. deficient).

A **Pudding Mixture** was completely devoid of Available Carbon Dioxide and would not, therefore, possess satisfactory raising properties. The requisite quantity of baking powder had been added originally, but had deteriorated through overlong storage.

Strawberry Jam.—In a large scale review of this commodity 29 samples were analysed of which 9 contained less than the 38 per cent. strawberry content required by the Food Standards (Preserves) Order. The actual fruit contents of the unsatisfactory samples varied from 31 to 35 per cent. In the course of the investigation many samples of fresh strawberries were analysed and enquiries made from Research Organisations in this country and overseas. All the unsatisfactory samples had been manufactured from imported pulp, a fact which made it extremely difficult to obtain the absolute proof necessary before a case could be taken to Court. Warning letters were sent to two manufacturers one of whom admitted that their pulp had not been of the fruit content expected.

Lemon Barley.—4 samples, all from the same manufacturer, were deficient in sugar to an extent varying between 20 per cent. and 46 per cent. The legal requirement of at least 7.5 per cent. sugar is by no means stringent and good quality products frequently contain over 20 per cent. sugar. Legal proceedings were instituted and a fine of £25 plus 50s. analysis fee was imposed.

Pineapple Juice, stated on the label to contain not less than 55 mgms. of Vitamin C per fluid ounce, actually contained only 27 mgms. (51 per cent. deficient).

Apples imported from Italy showed visible evidence of spray residues and on analysis were found to contain 6.1 parts per million of arsenic and 19 parts per million of lead. The legal limit for arsenic is one part per million and the recognised limit for lead 2 parts per million. None of the apples reached the public and their sale was forbidden.

Grape Brandy from a sealed bottle labelled 70 per cent. proof spirit was found to contain only 63 per cent. proof spirit (the equivalent of 10 per cent. of added water). The bottlers, who were prosecuted and fined £10 plus 50s. costs, stated that the brandy was imported "over-proof" in casks, and was diluted to the required strength with distilled water before bottling. On this occasion an excess of water had accidentally been added.

Liqueurs.—3 miniature bottles of liqueurs (the labels of two of which indicated that they contained 32 per cent. and 43 per cent. alcohol respectively), were found on analysis to contain over 99 per cent. of water, plus traces of sugar, citric acid and artificial colour.

A small label on the back of each bottle bore the words "contains sugar syrup," but the principal label was misleading and it seems probable that many purchasers would expect the bottles to contain genuine liqueurs, notwithstanding the fact that they were sold on unlicensed premises. In my opinion the bottles should be clearly labelled "non-alcoholic."

Prepacked foods which offended against the Labelling of Food Order, either by failing to specify, or incorrectly specifying the ingredients included *Mushroom Ketchup*, *Mustard Sauce*, *Piccalilli*, *Canned Mussels in Butter*, *Multi-Wonder Food*, *Enriched Rice*, *Marzipan*, *Fish Batter* and *Canned Veal Cutlets*.

Complaint samples from members of the public were, as usual, mostly in respect of foreign bodies in food. They comprised *Bread Cake* containing dirty dough, *Bread Roll* containing poppy seeds, particles of sand in *Biscuits*, a *Chocolate Coated Raisin* that proved to be a Chocolate Coated Lucerne seed, *Ground Rice* containing rodent droppings, a snail in *Blackcurrant Jam*, a piece of hide in a *Meat Pie*, crystals of sodium phosphate in *Cheese Spread*, an earwig in *Canned Chicken*, a lump of aluminium paint in a small *Fruit Pie*, straw in *Marmalade*, a neatly sliced lead pencil in a *Sliced Loaf* and crystals of struvite in *Canned Salmon* and *Canned Tuna*.

DRUGS

8 of the 80 samples examined proved unsatisfactory. Two samples of **Mouth Ulcer Tablets** were respectively 20 and 28 per cent. deficient in ascorbic acid.

Indian Brandee was 100 per cent. deficient in Sweet Spirits of Nitre and a **Cough Linctus** was 90 per cent. deficient in Chloroform.

Rose Hip and Orange, a somewhat expensive preparation sold as a Vitamin C adjunct for babies and small children, and claiming to contain 56 milligrammes of Vitamin C per fluid ounce, contained only 18 milligrammes (68 per cent. deficient).

Exception was taken to a bottle of **Chest and Lung Mixture** described on the label as "A Reliable Remedy for all Affections of the Throat, Chest and Lungs." Such a claim might lead to the use of this preparation for the treatment of tuberculosis and was, therefore, a contravention of the Pharmacy and Medicines Act, 1941.

The same Act was contravened by two other medicines, **Mentholated Cough Linctus** and **Sting Lotion**, both of which failed to give on their labels quantitative particulars of their active ingredients.

BACTERIOLOGICAL SAMPLES

1,126 Milks and 47 Ice-Creams were submitted to the required tests, the results being shown in the tables below.

The Methylene Blue Test measures the keeping quality of the milk, and the Phosphatase Test the efficiency of pasteurisation. The Turbidity Test, which is only carried out on Sterilised Milk, is designed to show whether or not such milk has been sufficiently heated.

MILK

Designation	Number examined	Unsatisfactory by			Percentage reported as unsatisfactory
		Methylene Blue test	Phosphatase test	Turbidity test	
T.T. Raw ..	436	6	..	..	1.4
Sterilised ..	104	..	..	..	Nil
Pasteurised :—					
Dairies ..	157	..	..	..	Nil
Schools ..	127	..	..	..	Nil
T.T. Pasteurised :—					
Dairies ..	267	..	1	..	0.4
Schools ..	35	..	..	..	Nil
Total ..	1,126	6	1	..	0.6

ICE-CREAM

Grade	Time taken to reduce Methylene Blue at 37°C	Number	Percentage	Quality
1.	4½ hours or more ..	22	46·8	Good
2.	2½ to 4 hours	10	21·3	Satisfac- tory
3.	½ to 2 hours	7	14·9	Unsatis- factory
4.	Nil	8	17·0	Very unsatis- factory
		47	100·0	

It will be seen that almost a third of the ice-cream samples were bacteriologically unsatisfactory. This is not such an alarming state of affairs as appears at first sight. The nationally distributed brands (which represent most of the sales) were invariably of Grade 1 quality. The unsatisfactory samples were the products of local manufacturers.

FERTILISERS AND FEEDING STUFFS

The 13 samples submitted comprised 11 Fertilisers and 2 Feeding Stuffs. Of these, 5 Fertilisers were unsatisfactory in one respect or another, details being shown in the following table.

Description	Irregularity
John Innes Base ..	1·3 per cent. deficient in Nitrogen. 4·4 per cent. excess Potash.
Turf Dressing	1·1 per cent. excess Nitrogen. 2·0 per cent. deficient in Soluble Phosphoric Acid. 1·0 per cent. deficient in Potash.
Vine and Plant Manure	2·0 per cent. deficient in Soluble Phosphoric Acid. 1·2 per cent. excess Insoluble Phosphoric Acid. 1·1 per cent. excess Potash.
Bone Meal	0·7 per cent. deficient in Nitrogen. 3·2 per cent. excess Phosphoric Acid.
Hoof and Horn Meal	0·9 per cent. deficient in Nitrogen.

ATMOSPHERIC POLLUTION

The measurement of atmospheric pollution in the city, using deposit gauges and lead peroxide candles, has continued at the same eight stations as in previous years. The additional temporary gauge at Sayner Lane (a site where there have been complaints of particularly bad pollution) was also continued. The results are shown in the table below:—

STATION	DEPOSIT GAUGES		LEAD PEROXIDE CANDLES	
	Average monthly deposit in tons per sq. mile		Average daily sulphur pollution as mgrms. of SO ₂ per 100 sq. cms. of exposed surface	
	1959	1958	1959	1958
Armley Park	19·8	20·8	2·5	2·6
Burley Park	21·8	18·6	2·4	2·4
Headingley	11·2	10·5	2·4	2·4
Hunslet	31·8	40·0	3·5	4·1
Market Buildings ..	20·3	22·1	3·9	3·9
Roundhay	10·2	10·7	1·6	1·8
St. James's Hospital ..	17·2	17·7	2·9	2·9
Temple Newsam	12·0	9·9	2·7	2·9
Sayner Lane (Temporary)	47·5	44·8	..	..
Average of all permanent sites	18·0	18·8	2·7	2·9

As will be seen, the overall averages are much the same as last year. Compared with last year there was a decided improvement during the unusually warm, dry summer of 1959, but this was counter-balanced by heavier pollution during the early and late months of the year.

The daily measurements of Smoke and Sulphur Dioxide in the atmosphere have also continued, using the apparatus installed in the laboratory and at the four sites within the proposed Central Smoke Control Area. The results are summarised in the table opposite.

During the 24 hour period ended at noon on 29th January the sulphur dioxide content of the air sampled outside Market Buildings reached the highest figure every recorded in Leeds, namely 134

parts per 100 million. This is eight times the normal January average, and equal to the highest figure recorded in the notorious London fog of 1952; fortunately the duration of the Leeds fog was much shorter. At the other end of the scale it is pleasing to record that during the long spell of fine weather in the summer of 1959 the daily Smoke Determinations were little more than half the figures for the corresponding period of 1958.

STATION	SMOKE		SULPHUR DIOXIDE	
	Milligrams per 100 cubic metres		Parts per 100 million	
	Daily Average		Daily Average	
	1959	1958	1959	1958
Blenheim ..	34	51	10.9	12
Hyde Terrace ..	34	52	13.1	13
Market Buildings	34	60	13.9	13
Park Square ..	32	49	14.2	12
Y.W.C.A. ..	35	50	19.8	16

RADIOACTIVITY

The necessary instruments for the monitoring of water, food-stuffs, etc., for radioactivity were received early in the year. After checking and calibration regular examination of the city's water was commenced in May. A sample is taken each week and the analysis is carried out on composite monthly samples.

The extremely fine dust resulting from nuclear explosions is diffused throughout the earth's atmosphere and is eventually deposited all over the globe. In view of the large number of nuclear weapons tested during 1958 it is therefore not surprising that a significant level of fall-out contamination was found in the city's water. It should be emphasised, however, that the level was always well below the limit recommended by the Medical Research Council. It is also comforting to be able to report that the level fell steadily throughout the summer and in the last three months of the year remained fairly constant at about one quarter of the May figure.

Three samples of Japanese Canned Salmon and two of Russian Canned Crabmeat were also tested for radioactivity. The amount present was not significant.

MISCELLANEOUS SAMPLES SUBMITTED BY THE PUBLIC HEALTH DEPARTMENT

20 samples of fresh strawberries, 3 of strawberry pulp, and 2 of pectin were analysed in connection with the investigation into the composition of strawberry jam.

Eight waters from flooded cellars and one deposit from an interceptor tank were analysed in order to determine their origin, attempts to elucidate this by other means having proved unsuccessful.

A Nicotine Insecticide was analysed in connection with an infringement of the Pharmacy and Poisons Act, the vendor being fined £45.

A sample of pastry, alleged to be responsible for sickness amongst its consumers, showed no abnormality.

SAMPLES SUBMITTED BY OTHER CORPORATION DEPARTMENTS

Central Purchasing Department.—Six samples of metal polish, four synthetic detergents, two samples of washing soda, and one floor polish were analysed in connection with the placing of contracts.

City Architect's Department.—One sample of plaster and one of sand were analysed. The sand failed to conform to the British Standard Specification laid down in the building contract, and its use in the plaster had caused the latter, also, to be unsatisfactory.

City Coroner.—17 specimens were analysed in respect of 8 deaths. In two cases the results were negative thus excluding the possibility of poisoning as a cause of death. In the other six cases, quantities of poison exceeding the respective fatal doses were isolated. The actual poisons involved were amytal, nembutal, phenobarbitone, seconal, tuinal and concentrated ammonia.

Education Department.—5 samples of sausages and 2 of milk were analysed for the School Meals Service. One of the sausage samples was slightly deficient in lean meat, but all the other samples were of good quality and conformed to the Contract Specifications.

Police Headquarters.—5 alleged intoxicating liquors were analysed.

Transport Department.—The regular analysis of the fuel oil used by the Corporation ' buses was continued, 86 samples being analysed during the year.

Waterworks Department.—The customary independent analysis of the city water was carried out each month, all samples proving satisfactory.

SAMPLES RECEIVED FROM OTHER SOURCES

Private Samples.—The 91 samples received under this heading represented a more than usually wide variety of investigations. 55 samples of foodstuffs (comprising milk, butter, fish cakes, flavouring essences, and cordial concentrates), were analysed for local firms, as also were 2 samples of fertilisers. 9 samples of water were analysed, mostly towards the end of the drought period, when a number of firms were anxious to discover alternative sources of water (e.g. wells, streams and ponds) in case the public supply should be rationed.

A member of the public who had purchased an old earthenware vessel for preparing home-made wine had heard of the danger of using lead-glazed vessels for this purpose, and asked for advice on the subject. He was advised to pour a weak solution of citric acid into the vessel, leave for 24 hours, then forward the solution to this laboratory for analysis. The solution was found to contain 220 parts of lead per million, which proved an appreciable amount of lead to be present in the glaze, making the vessel quite unsuitable for fermenting wine.

The matter was reported in the local press and, as a result, a further seven members of the public submitted samples of home-made wine with requests that their lead content be determined. All of these samples contained less than the accepted safe limit of one part per million for lead in wine.

The organs of a kitten were submitted by a veterinary surgeon for examination for poisons, but none were found. Similarly a sample of tea submitted by a doctor was found to be free from poisons.

On behalf of an old-age pensioner, a welfare worker submitted four hair preparations. The pensioner had spent much of her savings on numerous bottles of these preparations without achieving the desired result. Analysis showed their value to be open to considerable doubt, and the price charged to be exorbitant, but rather reluctantly it was concluded that no contravention of the Law was involved.

A plastic beaker was submitted and the white solid contained in it was found to be pure caustic soda. The beaker had been discovered by two children who after tasting the contents had suffered severe burns on the lips and tongue.

From the British Museum (via the Forensic Medicine Department at Leeds University) was received some material recently taken from a casket dated 1733. The material had surrounded a heart embalmed in the casket and its identification was required. It proved to consist of wheat bran.

Other private samples consisted of a household cleanser, building sand, a deposit from a central heating system, petrol, a solution for pH determination, and (for standardisation) two solutions for use in the G.C.E. Chemistry examinations.

Leeds General Infirmary.—The arsenic content of a specimen of liver, and the bromide level of a specimen of urine were determined.

Leeds Group "B" Hospital Management Committee.—6 samples of sausages were analysed.

Rothwell Urban District Council.—16 samples of water were analysed.

Wakefield Corporation.—207 food and drug samples, 6 fertilisers, 5 waters, and 32 atmospheric pollution samples were analysed.

FOOD AND DRUGS ACT, 1955.
SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1959.

Article	Number examined	Number unsatis- factory
FOODS (3,146)		
Almonds, ground	7	..
Apples	1	1
Baby Food	8	1
Baking powder	6	..
Beer	6	1
Beverages, powdered	2	..
Biscuit	1	1
Bread	7	4
Butter	5	..
Butter, brandy flavour	2	..
Butter, rum flavour	1	..
Buttered teacakes	7	3
Cakes and tarts	21	8
Cake, pudding and bun mixtures	25	2
Cheese and cheese spreads	10	2
Cherries, glacé	3	..
Chicken croquettes	1	..
Chicken, and chicken preparations, (canned and bottled)	11	4
Chocolate and chocolate spread	6	..
Chocolate coated raisins	1	1
Coconut, desiccated	2	..
Coffee, coffee and chicory essence	10	..
Cordial essences	1	..
Cornflour	3	..
Crab meat and crab spread (canned and bottled)	8	..
Cranberries (bottled)	1	..
Cream (canned)	6	..
Curry powder	2	..
Custard and blancmange powders	8	..
Dripping	1	..
Fish batter	1	1
Fish cakes	11	3
Fish paste	3	..
Fish, pickled	1	..
Flavouring	1	..
Carried forward	190	32

FOOD AND DRUGS ACT, 1955.
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1959—*continued*

Article	Number examined	Number unsatis- factory
Brought forward	190	32
Flour	12	1
Food colouring	2	..
Frizets, tomato	1	..
Fruit juice	11	1
Fruit pies	5	2
Gelatine	1	..
Ginger wine	1	..
Ginger, ground	1	..
Glucose and glucose syrup	3	..
Gravy powder	2	..
Herring fillets in lemon sauce.. ..	1	..
Honey	1	..
Horlicks tablets	1	..
Ice-cream, ice-cream powder, iced lollies	14	1
Icing preparations	2	..
Jellies, jelly crystals and creams	13	..
Lard and cooking fats	5	..
Lemon pie filling	1	..
Liqueurs	3	3
Macaroon paste	1	..
Margarine	9	..
Marzipan	2	1
Marzipan substitute powder	1	..
Mayonnaise	2	..
Meat extract	1	..
Meat paste and potted meat	9	..
Meat pies	5	1
Meat products (canned):		
Beef casserole	1	1
Braised steak	1	..
Ham, chopped.. ..	1	1
Ham and tongue	1	..
Lamb chops	1	..
Luncheon meat, pork	1	..
Minced beef loaf	1	..
Pork and tongue, chopped	1	..
Carried forward	308	44

FOOD AND DRUGS ACT, 1955
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1959—*continued*

Article	Number examined	Number unsatis- factory
Brought forward	308	44
Stewed steak	I	..
Stewed steak in gravy	I	I
Steak and kidney pudding	I	..
Veal cutlets in cream sauce	I	I
Milk	2,492	46
Milk, Channel Island	20	..
Milk, condensed and evaporated (canned)	5	..
Milk diet (canned)	I	..
Milk pudding (canned)	10	I
Milk Shake syrup	3	..
Multi-wonder Food	I	I
Mushrooms, creamed (canned)	2	..
Mussels in butter (canned)	2	2
Mustard	3	..
Nut mix, ground	2	..
Nutmegs, ground	3	..
Noodles	I	..
Oats and oatmeal	3	..
Olive Oil	3	..
Pastry Mix	I	..
Pea flour	I	..
Peanut butter	I	..
Pepper	3	..
Pickles and Sauces	29	3
Preserves	59	II
Puddings, ready made	5	..
Rennet, essence of	I	..
Rice and ground rice	3	2
Saccharin tablets	4	..
Sage and onion stuffing	I	..
Salmon, potted salmon, etc.	8	2
Salox	2	..
Salt	I	..
Sausages	53	10
Sausage rolls	I	..
Shrimps (canned and bottled).. ..	2	..
Carried forward	3,038	124

FOOD AND DRUGS, ACT 1955.
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1959.—*continued*

Article	Number examined	Number unsatis- factory
Brought forward	3,038	124
Silver Boules	1	..
Soft drinks and soft drink powders ..	34	4
Soups and soup powders	7	..
Spirits	13	1
Sugar aniseed	1	..
Sugared strands	1	..
Suet, beef.. ..	1	..
Sweets	14	..
Tea	4	..
Trifle pack	1	..
Tuna (canned)	2	2
Turkey in jelly, minced (bottled) ..	1	..
Vanilla Sugar	1	..
Vegetable juices (canned)	1	..
Vinegar, cider	1	..
Vinegar, malt	11	..
Virol	1	..
Wheat Embryo	1	..
Wines	12	2
DRUGS (80)		
Adrenaline and massage creams ..	4	..
Antiseptic ointment and lozenges ..	6	2
Aspirin tablets	1	..
Back and kidney pills	1	..
Chlorophyll tablets	1	..
Codeine Tablets	1	..
Compound Vitamin Tablets	5	..
Cough mixtures, lozenges and tablets..	32	3
Glucose tablets	1	..
Halibut Liver Oil Capsules	2	..
Indigestion lozenges and tablets ..	5	..
Indian Brandee	1	1
Iron and Yeast tablets	2	..
Laxative preparations	2	..
Carried forward	3,210	139

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1959—*continued*

Article	Number examined	Number unsatis- factory
Brought forward	3,210	139
Nerve tonic tablets	2	..
Pain-killing tablets	3	..
Rheumatic tablets	1	..
Rose hip syrup ; rose hip and orange..	3	1
Sciatica and Nerve Pain Capsules ..	1	..
Slimming tablets	1	..
Sting Lotion	1	1
Sunburn capsules	1	..
Tranquillisers	3	..
TOTAL FOOD AND DRUGS ..	3,226	141

TABLE I		TABLE II	
Year	Value	Year	Value
1900	100	1910	150
1905	120	1915	200
1910	150	1920	250
1915	200	1925	300
1920	250	1930	350
1925	300	1935	400
1930	350	1940	450
1935	400	1945	500
1940	450	1950	550
1945	500	1955	600
1950	550	1960	650
1955	600	1965	700
1960	650	1970	750
1965	700	1975	800
1970	750	1980	850
1975	800	1985	900
1980	850	1990	950
1985	900	1995	1000
1990	950	2000	1050
1995	1000	2005	1100
2000	1050	2010	1150
2005	1100	2015	1200
2010	1150	2020	1250
2015	1200	2025	1300
2020	1250	2025	1350

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B.C.G. Vaccination	40
Birth-rate—adjusted	5
—crude	3
Births—notified	78
—registered	3
Blindness, Incidence of	29
Bovine Tuberculosis	179
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